

# Curriculum Vitae

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**ICREA Research Professor**

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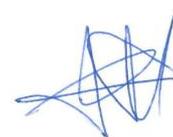
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Prof. Jordi Sort  
Bellaterra, 05/02/2026

# Synopsis

Prof. Jordi Sort (aged 49) is currently working as an **ICREA Research Professor** at the Universitat Autònoma de Barcelona (UAB), where he leads the **Group of Smart Nanoengineered Materials, Nanomechanics and Nanomagnetism (Gnm<sup>3</sup>) (2021-SGR-00651)**, now consisting of **around 18 members** including 5 Senior researchers, 5 Postdocs, 6 PhD students, 1 Technician and 1 Project Manager. The research activities of the group focus on the synthesis of **functional materials** (electrodeposited films, lithographed structures, porous materials, bulk metallic glasses, nanocomposites, etc.) for **advanced engineering applications** (nanomechanical, magnetic, magnetoelectric and catalytic properties). The group develops new types of materials, whose microstructure can be precisely controlled at the nanoscale, to boost new functionalities that go **beyond the state of the art**. For further details on our group, see: <https://jsort-icrea.uab.cat/>.

Furthermore, since December 2025, Prof. Sort is leading the **Nanomaterials for Advanced Memory and Computing Group** at the Catalan Institute of Nanoscience and Nanotechnology, which focuses on the implementation of novel nanoscale-material-based memory and computing concepts with enhanced write/read energy efficiency.

Some of the **main achievements** of Prof. Sort's research outcome can be summarized as follows: (i) development of new approaches to control the magnetic behavior of materials by non-magnetic means (mechanical strain, ion irradiation or voltage); (ii) transfer of domains (i.e., bits of data) from ferromagnetic to antiferromagnetic materials, which is appealing for the development of energy-efficient hybrid memories (e.g., neuromorphic computing or anti-hacking memory architectures); (iii) discovery of "exchange biased vortices" and "magneto-ionic vortices", two new types of magnetization reversal mechanisms with applications in magnetic data storage (including analog computing) and spin-valve magnetic sensors; (iv) study of the nanomechanical properties of unconventional metallic alloys, metallic glasses and regoliths collected from the outer space (Moon, asteroids, comets); (v) development and characterization of new types of biomaterials including implants and magnetically guided nanorobotic platforms for targeted drug delivery; (vi) enhancement of the mechanical, magnetic and catalytic performance of environmentally friendly and sustainable nanoporous oxides and alloys for energy efficiency applications and water remediation.

Prof. Sort got his PhD degree in Materials Science at UAB in 2002. He performed postdoctoral research stays at **SPINTEC** (Grenoble, France) and **Argonne National Laboratory** (USA). He also stayed several months at the **High Magnetic Fields Laboratory** (Grenoble, France), **Los Alamos National Laboratory** (USA), the **Rheinisch-Westfälische Technische Hochschule (RWTH, Aachen, Germany)** and the **Helmholtz-Zentrum Dresden-Rossendorf** (Germany). Overall, he has **over four years of research experience abroad**.

So far, Prof. Sort has **supervised 21 PhD students** (5 more are in progress) and has published more than **400 articles**. These publications have received more than **14200 citations (h = 60)** according to the **ISI Web of Science** metrics (**h = 70** and **> 18800 citations** according to **Scholar Google**). The papers have been published in prestigious journals (mostly Q1) e.g.:

**9 Phys. Rev. Lett., 1 Nat. Nanotechnol., 4 Nat. Commun., 5 Adv. Mater., 4 J. Am. Chem. Soc., 1 Phys. Rep., 9 Adv. Funct. Mater., 7 Small, 25 Appl. Phys. Lett., 3 J. Mater. Chem. A, 15 Nanoscale, 15 Electrochim. Acta, 19 ACS Appl. Mater. Interf., 5 ACS Nano, 4 APL Materials, etc.**

The work of the Team has been presented as **invited/keynote/plenary talks in around 230 international conferences**. Prof. Sort has filled **8 patents** and has managed **40 national/international research** projects (he has participated as researcher in more than 66 research projects). He has also **Agreements with the Private Sector**, with the companies *Gestamp-Linares S.A.*, and the *CETEMMSA-Eurecat* and *IK4-CIDETEC-San Sebastian* Technological Centers, *Singulus Technologies*, and also with the *Fábrica Nacional de Moneda y Timbre*.

During **the last 5 years**, concerning citations, his papers have been cited more **5000 times**, with **more than 900 citations/year** on average. Prof. Sort has also co-authored **6 book chapters** and **co-edited 5 books** during the period 2015-2025 on fields related to Nanotechnology. In this period, Prof. Sort has also served in the **Editorial Board** of various journals: *Nanomaterials*, *Materials* and *Coatings* from MDPI, *3D Research* from Springer, etc. He was main **Section Editor in Nanomaterials** for 5 years and is now **Associate Editor of APL Materials**. He has served as a member of various **Evaluation Commissions**: European Research Council (**ERC, PE11 CoG-2022 Panel Member**), Agencia Estatal de Investigación **AEI** ("Gestor" since 2025), Catalan Agency for Management of University and Research Grants **AGAUR**, "Deutsche Forschungsgemeinschaft" **DFG**, **Science Foundation Ireland**, **National Research Foundation – Singapore**, etc. Furthermore, he has also been **Co-organizer or Programme Committee member of several conferences**, such as the 58<sup>th</sup> MMM, ISMANAM, Intermag 2014, 2015 E-MRS, ICM 2015, ENM Meetings, FIMPART, **MMM 2022** (as **Program Co-Chair**), Intermag 2026, etc. Regarding our **outreach activities**, some of our results have been featured in national and international media (TV3, RTVE, ABC, Cordis, Science News, etc.). He is also teaching nanomagnetism at the **Official Master on Advanced Nanoscience and Nanotechnology** at UAB.

Prof. Sort has been Coordinator of two European Training Networks ('SELECTA' and 'BeMAGIC'), and Principal Investigator of several Grants from the European Research Council (**ERC**): 'SPIN-PORICS' **Consolidator Grant** (2014), 'MAGIC-SWITCH' **Proof of Concept Grant** (2019), 'REMINDS' **Advanced Grant** (2022) and 'SECURE-FLEXI MAG' **Proof of Concept Grant** (2025). The 'REMINDS' Project with title "Voltage-Reconfigurable Magnetic Invisibility: A New Concept for Data Security Based on Engineered Magnetoelectric Materials" aims to set the foundations of a new 'security-by-materials-design' approach in which innovative magnetoelectric materials and protocols will be developed to achieve highly energy-efficient and self-protected primitives for diverse data security technologies. The project allows me to merge my knowledge in **magnetoelectricity** with my former studies on **magnetic domain imprinting**.

Prof. Sort received the **PhD UAB Extraordinary Award** in 2004 and his work was also awarded by the Catalan Physical Society (**Jordi Porta i Jué's Prize**, 2000), the Spanish Royal Physical Society (**Young Researcher Award in Experimental Physics**, 2003), the Federation of European Materials Societies (**FEMS Materials Science & Technology Prize**, 2015) and UPC/Naturgy (**Duran Farell Award**, 2020).

Prof. Sort is **Fellow of the Institute of Physics** (IOP) and member of the **Technical and Educational Commissions** of the **IEEE Magnetic Society**, as well as **AdCom Member of the MMM**.

## Personal data

Family name: **SORT VIÑAS**

Forename: **Jordi**

ID/Passport no: 45480838V

Date of birth: 30/03/76

Gender: Male

Nationality: Spanish

## Present Professional Activity

Institution: ICREA Research Professor and Head of the Gnm3 Group at the Universitat Autònoma de Barcelona (UAB), and Group Leader at the Catalan Institute of Nanoscience and Nanotechnology (Campus UAB)

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Webpage: <http://jsort-icrea.uab.cat/>

Field of study (UNESCO codes): 331208, 220208

Professional Status: Research Professor

Start date: 01/10/05

Administrative status

Permanent Staff

Hired on contracts

Acting

Fellowship holder

Others (specify):

Full-time

Part-time

## Research Area (Keywords)

Nanostructures, nanoparticles, thin films, bulk materials, metastable phases, magnetic aerogels, metallic glasses, nanocomposites, magnetic sensors, magnetic multilayers, exchange bias, soft ferromagnets, hard ferromagnets, mechanical alloying, mechanical milling, sol-gel process, suction casting, sputtering, molecular beam epitaxy, electron beam lithography, nanosphere lithography, mechanical properties, nanoindentation, microhardness, tensile tests, acoustic measurements (pulse-echo technique), structural characterization, microstructures, X-ray and neutron diffraction, thermal characterization, differential scanning calorimetry, magnetometry (VSM and SQUID), nuclear magnetic resonance, magneto-optic Kerr effect, electron microscopy (SEM and TEM), atomic/magnetic force microscopy (AFM/MFM), magnetic thermogravimetry, magnetic dichroism, magneto-ionics, advanced computing.

## Academic Background

Bachelor	Centre	Date
Bsc in Physics Science	Universitat Autònoma de Barcelona	1998
Master in Materials Science	Universitat Autònoma de Barcelona	2000

Ph.D.	Centre	Date
PhD Degree in Materials Science	Universitat Autònoma de Barcelona	03/10/2002

## Past Scientific Experience

Position	R&D Centre	Institution	Start date	End date
Associate Professor	Physics Department UAB		September 1998	December 1998
PhD Fellowship F.P.I.	Physics Department UAB		January 1999	October 2002
Postdoc Researcher	SPINTEC	CEA-Grenoble	October 2002	December 2004
Associate Professor	Physics Department UAB		January 2005	December 2009
ICREA Junior Researcher	Physics Department UAB	ICREA	October 2005	September 2010

## Languages (G = Good, F = Fluent, P = Perfectly)

Language	Speaking	Reading	Writing
Catalan	P	P	P
Spanish	P	P	P
English	P	P	P
French	G	F	G

## Participation in Research Projects

**1. PROJECT TITLE:** Síntesis por aleado mecánico y caracterización estructural, magnética y térmica de materiales nanoestructurados de interés industrial (MAT98-0730)

**FINANCIAL ENTITY:** DGES (11.316.000 pta)

**LENGTH**

**FROM:** 1998

**TO:** 2000

**PRINCIPAL INVESTIGATOR:** Prof. María Dolors Baró Mariné

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**2. PROJECT TITLE:** Materiales nanoestructurados con aplicaciones magnéticas

**FINANCIAL ENTITY:** MEC (1.000.000 pta)

**LENGTH**

**FROM:** 1998

**TO:** 1999

**PRINCIPAL INVESTIGATOR:** Prof. María Dolors Baró Mariné

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**3. PROJECT TITLE:** Mejora del Producto de Energía (BH)<sub>Max</sub> de Ferritas de Ba, Sr mediante procesos de canje magnético

**FINANCIAL ENTITY:** PETRI-CICYT (16.273.000 pta)

**LENGTH**

**FROM:** 1999

**TO:** 2000

**PRINCIPAL INVESTIGATOR:** Prof. Juan Santiago Muñoz

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**4. PROJECT TITLE:** Materiales nanoestructurados con aplicaciones magnéticas

**FINANCIAL ENTITY:** MEC (1.000.000 pta)

**LENGTH**

**FROM:** 1999

**TO:** 2000

**PRINCIPAL INVESTIGATOR:** Prof. María Dolors Baró Mariné

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**5. PROJECT TITLE:** 1999SGR 00340

**FINANCIAL ENTITY:** DGR Generalitat Catalunya (2.200.000 pta)

**LENGTH**

**FROM:** 1998

**TO:** 2000

**PRINCIPAL INVESTIGATOR:** Prof. Fernando López Aguilar

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**6. PROJECT TITLE:** Materiales nanoestructurados con aplicaciones magnéticas

**FINANCIAL ENTITY:** MEC (1.000.000 pta)

**LENGTH**

**FROM:** 2000

**TO:** 2001

**PRINCIPAL INVESTIGATOR:** Prof. María Dolors Baró Mariné

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**7. PROJECT TITLE:** Materiales nanoestructurados; caracterización, propiedades y aplicaciones (MAT2001-2555)

**FINANCIAL ENTITY:** MCYT (16.870.000 pta)

**LENGTH**

**FROM:** 2001

**TO:** 2004

**PRINCIPAL INVESTIGATOR:** Prof. María Dolors Baró Mariné

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**8. PROJECT TITLE:** 2001SGR 00189

**FINANCIAL ENTITY:** DGR Generalitat de Catalunya (3.000.000 pta)

**LENGTH**

**FROM:** 2001

**TO:** 2004

**PRINCIPAL INVESTIGATOR:** Prof. María Dolors Baró Mariné

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**9. PROJECT TITLE:** Exchange bias systems for advanced magnetic devices (HPRN-CT-2002-00296)

**FINANCIAL ENTITY:** EU (200.000 €)

**LENGTH**

**FROM:** 2002

**TO:** 2005

**PRINCIPAL INVESTIGATOR:** Dr. Bernard Dieny

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**10. PROJECT TITLE:** Materiales nanoestructurados con posibles aplicaciones funcionales y/o estructurales (MAT2004-01679)

**FINANCIAL ENTITY:** MEC (116170 €)

**LENGTH**

**FROM:** 2004

**TO:** 2006

**PRINCIPAL INVESTIGATOR:** Prof. María Dolores Baró Mariné

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**11. PROJECT TITLE:** 2005SGR 00401

**FINANCIAL ENTITY:** DGR Generalitat de Catalunya (37600 €)

**LENGTH**

**FROM:** 2005

**TO:** 2008

**PRINCIPAL INVESTIGATOR:** Prof. María Dolores Baró Mariné

**COORDINATOR (junior):** Dr. Jordi Sort

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**12. PROJECT TITLE:** Aplicacions del ferromagnetisme induït per deformació mecànica local: (i) detecció no destructiva de fallida mecànica i (ii) fabricació de nanoestructures magnètiques (PNL2006-019)

**FINANCIAL ENTITY:** Preparació de noves línies de recerca - UAB (6000 €)

**LENGTH**

**FROM:** 2006

**TO:** 2007

**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**13. PROJECT TITLE:** Producció de material docent per a ciència de materials mitjançant microscòpia electrònica de rastreig i làser (2006MQD 00036)

**FINANCIAL ENTITY:** Proyectos para la mejora de la calidad docente de las Universidades-DURSI

**ENTIDADES PARTICIPANTES:** UAB (6000 €)

**LENGTH**

**FROM:** 2006

**TO:** 2007

**PRINCIPAL INVESTIGATOR:** Prof. María Dolores Baró Mariné

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**14. PROJECT TITLE:** NANOBIOEMED (CSD00C-06-04615)

**FINANCIAL ENTITY:** Ministerio de Educación y Ciencia- Programa Consolider-Ingenio 2010 (4500000 €)

**OTHER PARTICIPATING INSTITUTIONS:** Instituto Universitario de Investigación de Nanociencia de Aragón (INA), Universidad Autónoma de Barcelona, Universidades de Santiago de Compostela y Vigo, Instituto Catalán de Nanotecnología (ICN), el Instituto de Ciencia de los Materiales de Barcelona, Instituto de Nanociencia y Nanotecnología de la Universidad de Barcelona y el Parque Tecnológico de Barcelona

**LENGTH**

**FROM:** 2006

**TO:** 2011

**PRINCIPAL INVESTIGATOR:** Prof. Ricardo Ibarra

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**15. PROJECT TITLE:** HF2006-0197 (Tailoring Magnetization Reversal in Patterned and Exchange Coupled Magnetic Nanostructures)

**FINANCIAL ENTITY:** MEC - (11000 €)- Acción Integrada (11000 Euro)

**OTHER PARTICIPATING INSTITUTIONS:** Institut Català de Nanotecnologia, SPINTEC (CEA-Grenoble)

**LENGTH** FROM: 2007 TO: 2008  
**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**16. PROJECT TITLE:** PBH2006-0007  
**FINANCIAL ENTITY:** MEC – “Becas y ayudas para la cooperación interuniversitaria con Brasil” (8175 Euro)  
**OTHER PARTICIPANTING INSTITUTIONS:** Universidad Federal de Sao Carlos  
**LENGTH** FROM: 2007 TO: 2008  
**PRINCIPAL INVESTIGATOR:** Prof. M. D. Baró

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**17. PROJECT TITLE:** Complex Solid State Reactions for Energy Efficient Hydrogen Storage - COSY- (EU MRTN-CT-2006-035366)  
**FINANCIAL ENTITY:** European Union- Marie Curie Action: Research Training Network Sixth Work Programme (2467170 €)  
**OTHER PARTICIPANTING INSTITUTIONS:**UAB, GKSS Geesthacht, University of Torino, ESRF Grenoble, IFW Dresden, University of Twente, CSIC, INP Grenoble, University of Oxford, University of Fribourg, University of Picardie, FZK Research Center Karlsruhe  
**LENGTH** FROM: 2006 TO: 2010  
**PRINCIPAL INVESTIGATOR:** Prof. M. D. Baró

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**18. PROJECT TITLE:** Advanced characterization and innovative applications based on nanomechanical testing (MAT2007-61629)  
**FINANCIAL ENTITY:** MEC (151205 €)  
**LENGTH** FROM: 2007 TO: 2010  
**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**19. PROJECT TITLE:** Nuevos medios de almacenamiento magnético de ultra-alta densidad basados en el auto-ensamblaje de nanopartículas multi-nivel (MAT2008-01939-E)  
**FINANCIAL ENTITY:** MICINN. Explora-Ingenio 2010 Program (55000 €)  
**LENGTH** FROM: 2008 TO: 2009  
**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**20. PROJECT TITLE:** Compra d'accessoris per a un microscopio de forces atòmiques  
**FINANCIAL ENTITY:** PEIR- AGAUR – Generalitat de Catalunya (44775 €)  
**LENGTH** FROM: 2008 TO: 2008  
**PRINCIPAL INVESTIGATOR:** Prof. Maria Dolors Baró

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**21. PROJECT TITLE:** Litografía magnética de alta densidad y con anisotropía perpendicular de superficies planas no magnéticas mediante irradiación con haz de iones  
**FINANCIAL ENTITY:** GICSERV Program (MEC). Proyecto de Acceso a la Sala Blanca Integrada de Micro y Nanoelectrónica del Centro Nacional de Microelectrónica.  
**LENGTH** FROM: 2008 TO: 2009  
**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**22. PROJECT TITLE:** International workshop on the structural and mechanical properties of metallic glasses  
**FINANCIAL ENTITY:** MICINN. Complementary Action (9000 €)  
**LENGTH** FROM: 2008 TO: 2009  
**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**23. PROJECT TITLE:** Improving the gender diversity management in Materials Research Institutions (DIVERSITY)

**FINANCIAL ENTITY:** (European Union, 7<sup>th</sup> Work Programme), 315083 €

**LENGTH** FROM: 2009

TO: 2012

**PRINCIPAL INVESTIGATOR:** Prof. M. D. Baró

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**24. PROJECT TITLE:** International Workshop on the structural and mechanical properties of metallic glasses (MAT2008- 03293-E)

**FINANCIAL ENTITY:** Ministerio de Ciencia e Innovación (Acción Complementaria) 9000 Euro

**LENGTH** FROM: 2009

TO: 2009

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**25. PROJECT TITLE:** ICREA Starting Fund UAB

**FINANCIAL ENTITY:** Universitat Autònoma de Barcelona, 82.600 €

**LENGTH** FROM: 2010

TO: 2011

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**26. PROJECT TITLE:** Grup de recerca consolidat (2009 SGR-1292)

**FINANCIAL ENTITY:** DGR (Generalitat de Catalunya) 48.800 €

**LENGTH** FROM: 2009

TO: 2013

**PRINCIPAL INVESTIGATOR:** Prof. M. D. Baró

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**27. PROJECT TITLE:** Academic-Industrial Initial Training Network on Innovative Biocompatible Titanium-base Structures for Orthopaedics (FP7-PEOPLE-2010-ITN-264635)

**FINANCIAL ENTITY:** EU- FP7 3.571.711 €; Budget assigned to our group: 227.479,6 €

**LENGTH** FROM: 2011

TO: 2014

**PRINCIPAL INVESTIGATOR (Spanish Team):** Prof. M. D. Baró

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**28. PROJECT TITLE:** Manipulación superficial de materiales nanoestructurados para aplicaciones innovadoras NANOSURF (MAT2011-27380-C02-01)

**FINANCIAL ENTITY:** Ministerio de Ciencia e Innovación 117.190€ (80.000 € to our group)

**LENGTH:** FROM: 2011

TO: 2014

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**29. PROJECT TITLE:** Fabricació mitjançant mètodes electroquímics de recobriments de coure porós amb interconnectivitat tridimensional (Cu-FOAM)

**FINANCIAL ENTITY:** La Farga 30.000€

**LENGTH:** FROM: 2011

TO: 2012

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**30. PROJECT TITLE:** Litografía magnética de alta densidad inducida mediante irradiación con iones de aleaciones no magnéticas a través de máscaras de copolímero con diámetro de poro inferior a 50 nm

**FINANCIAL ENTITY:** GICSERV Program (MEC). Proyecto de Acceso a la Sala Blanca Integrada de Micro y Nanoelectrónica del Centro Nacional de Microelectrónica. 2800€

**LENGTH:** FROM: 2011

TO: 2012

**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**31. PROJECT TITLE:** "Magnetic Nano Actuators for Quantitative Analysis" (MANAQA)  
**FINANCIAL ENTITY:** European Union (FET-Open, FP7-ICT-2011-C-296679). Total budget: 2.775.302 €; Budget assigned to our group: 449.632 €  
**LENGTH:** FROM: 2012 TO: 2015  
**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Jordi Sort

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**32. PROJECT TITLE:** Thermomechanical response of Cu-based shape memory alloys suitable for micro-electro-mechanical systems (MEMS) applications: interplay between grain size and sample size effects (SMAMEMS)  
**FINANCIAL ENTITY:** European Union (FP7-PEOPLE-2012-IOF). Total budget: 220.973 €.  
**LENGTH:** FROM: 2013 TO: 2016  
**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Jordi Sort

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**33. PROJECT TITLE:** Electrodeposition of novel nanostructured and porous materials for advanced applications: synthesis, structural characterization and physical/chemical performance (CSC 201306250050)  
**FINANCIAL ENTITY:** Chinese Research Council. Total budget: 30.000 €.  
**LENGTH:** FROM: 2013 TO: 2016  
**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Jordi Sort

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**34. PROJECT TITLE:** Synthesis, structural characterization and mechanical properties of nanocrystalline alloys and bulk amorphous alloys for novel engineering applications  
**FINANCIAL ENTITY:** Chinese Research Council. Total budget: 30.000 €.  
**LENGTH:** FROM: 2014 TO: 2017  
**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Jordi Sort

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**35. PROJECT TITLE:** Synthesis and assessment of the mechanical, magnetic and photoluminescence properties of nanoporous oxide materials for advanced engineering applications  
**FINANCIAL ENTITY:** Chinese Research Council. Total budget: 30.000 €.  
**LENGTH:** FROM: 2013 TO: 2016  
**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Jordi Sort

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**36. PROJECT TITLE:** Induction of ferromagnetism by Co implantation in mesoporous MgNb<sub>2</sub>O<sub>6</sub> high-k dielectrics: towards ferromagnetic mesoporous insulating ceramics  
**FINANCIAL ENTITY:** European Union (Spirit). Total budget: 3.000 €.  
**LENGTH:** FROM: 2013 TO: 2013  
**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Jordi Sort

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**37. PROJECT TITLE:** Mejora de la funcionalidad de vidrios metálicos mediante irradiación superficial con haces de iones (ICTS-NGG-263)  
**FINANCIAL ENTITY:** GICSERV Program (MEC). Proyecto de Acceso a la Sala Blanca Integrada de Micro y Nanoelectrónica del Centro Nacional de Microelectrónica. 2.800 €  
**LENGTH:** FROM: 2012 TO: 2013  
**PRINCIPAL INVESTIGATOR:** Dr. Jordi Sort

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**38. PROJECT TITLE:** Development of Sustainable Interrelations between Education, Research and Innovation at WBC Universities in Nanotechnologies and Advanced Materials where Innovation Means Business

**FINANCIAL ENTITY:** European Union (TEMPUS). Total budget: 1.349.043,2 €; Budget assigned to our group: 67.203 €

**LENGTH:** FROM: 2013 TO: 2016

**PRINCIPAL INVESTIGATOR (Spanish Team):** Dr. Eva Pellicer

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**39. PROJECT TITLE:** Grup de Recerca Consolidat Gnm<sup>3</sup> (2014-SRG-1015)

**FINANCIAL ENTITY:** Catalan Administration (SGR). Total budget: 30.000

**LENGTH:** FROM: 2014 TO: 2016

**PRINCIPAL INVESTIGATOR (Spanish Team):** Prof. Jordi Sort

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**40. PROJECT TITLE:** Síntesi de nanopartícules d'òxid de zinc dopades amb òxids de metalls de transició per aplicació en dispositius electroluminiscents híbrids (HyLEDs).

**FINANCIAL ENTITY:** Private Contract with CETEMMSA (Technological Center).

Total budget: 10.000 €

**LENGTH:** FROM: 2014 TO: 2015

**PRINCIPAL INVESTIGATOR (Spanish Team):** Prof. Maria Dolors Baró

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**41. PROJECT TITLE:** Electrochemical processing methodologies and corrosion protection for device and systems miniaturization (e-MINDS)

**FINANCIAL ENTITY:** European Commission (Cost Action). Total budget: 520.000 €; Budget assigned to our group: Annual Expenses (expected ~ 50.000 €).

**LENGTH:** FROM: 2015 TO: 2018

**PRINCIPAL INVESTIGATOR:** Dr. Salvador Pané (Coordinator of the Network)

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**42. PROJECT TITLE:** Smart ELECTrodeposited Alloys for environmentally sustainable applications: from advanced protective coatings to micro/nano-robotic platforms (SELECTA)

**FINANCIAL ENTITY:** European Commission (Marie Skłodowska- Curie Innovative Training Networks (ITN-ETN). Total budget: 3.805.423,7 €; Budget assigned to our group: 703.105 €

**LENGTH:** FROM: 2015 TO: 2018

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort (Coordinator of the Network)

See webpage: <http://selecta-etn.eu/>

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**43. PROJECT TITLE:** Merging Nanoporous Materials for Energy-Efficient Spintronics (SPINPORICS)

**FINANCIAL ENTITY:** European Research Council (Consolidator Grant 2014).

Total budget: 1.794.380 €

**LENGTH:** FROM: 2015 TO: 2020

**PRINCIPAL INVESTIGATOR (Spanish Team):** Prof. Jordi Sort

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**44. PROJECT TITLE:** Nuevas aleaciones nanoporosas para aplicaciones biomédicas avanzadas y descontaminación de aguas (ENV-BIO-PORAL)

**FINANCIAL ENTITY:** MINECO (Proyecto Retos Investigación)

Total budget: 471.150 € (296.451 € to our group)

**LENGTH:** FROM: 2015 TO: 2018

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**45. PROJECT TITLE:** Nanoporous materials for energy-efficient spin-based electronics (P-SPHERE)

**FINANCIAL ENTITY:** European Union (COFUND-2014, Marie Skłodowska-Curie grant agreement No 665919). Budget: 146.700 € (to our group)

**LENGTH:** FROM: 2016 TO: 2019

**PRINCIPAL INVESTIGATOR:** Universitat Autònoma de Barcelona (local supervisor: Dr. Eva Pellicer)

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**46. PROJECT TITLE:** Synthesis and characterization of Fe-based porous materials

**FINANCIAL ENTITY:** MINECO (Juan de la Cierva Call). Budget: 58.000 €

**LENGTH:** FROM: 2016 TO: 2019

**PRINCIPAL INVESTIGATOR:** Dr. Jordina Fornell

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**47. PROJECT TITLE:** Advanced integrative solutions to Corrosion problems beyond micro-scale: towards long-term durability of miniaturized Biomedical, Electronic and Energy systems (mCBEEs)

**FINANCIAL ENTITY:** European Commission (Marie Skłodowska- Curie Innovative Training Networks (ITN-ETN). Total budget: 3.726.379,44 €; Budget assigned to our group: 247.873 €

**LENGTH:** FROM: 2017 TO: 2021

**PRINCIPAL INVESTIGATOR:** Dr. Maria Lekka

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**48. PROJECT TITLE:** Grup de Recerca Consolidat Gnm<sup>3</sup> (2017-SRG-292)

**FINANCIAL ENTITY:** Catalan Administration (SGR). Total budget: 36.000 €

**LENGTH:** FROM: 2017 TO: 2021

**PRINCIPAL INVESTIGATOR (Spanish Team):** Prof. Jordi Sort

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**49. PROJECT TITLE:** Control de les propietats magnètiques de materials amb voltatge

**FINANCIAL ENTITY:** UAB (PIF Grant). Total budget: 46.000 €

**LENGTH:** FROM: 2017 TO: 2020

**PRINCIPAL INVESTIGATOR (Spanish Team):** Prof. Jordi Sort (PhD recipient: Veronica Sireus)

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**50. PROJECT TITLE:** Optimización del diseño de materiales de base metal para la producción de anillos estructurales

**FINANCIAL ENTITY:** private contract with ACRONIMUS (3.630 €)

**LENGTH:** FROM: 2018 TO: 2019

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**51. PROJECT TITLE:** Optimización de materiales de base metal para la producción de anillos estructurales

**FINANCIAL ENTITY:** private contract with Gestamp Linares S.A. (14.500 €)

**LENGTH:** FROM: 2018 TO: 2019

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**52. PROJECT TITLE:** Electrically-actuated porous materials for energy applications and sustainable tissue engineering technologies (ELECTRO-PORICS) - MAT2017-86357-C3

**FINANCIAL ENTITY:** MINECO (344.850 €); Budget to our Group: 211.750 €.

**LENGTH:** FROM: 2018 TO: 2020

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**53. PROJECT TITLE:** Magnetolectrics beyond 2020: a training programme on energy-efficient magnetoelectric nanomaterials for advanced information and healthcare technologies (BeMAGIC)

**FINANCIAL ENTITY:** European Commission (3.954.491 €); Budget to our Group: 671.809 €.

**LENGTH:** FROM: 2019 TO: 2023

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**54. PROJECT TITLE:** A robust and voltage-programmable magnetic keycard system: A new concept for ultra-secure and energy-efficient smart locks (MAGIC-LOCK)

**FINANCIAL ENTITY:** AGAUR (Llabor Call) (20.000 €).

**LENGTH:** FROM: 2019 TO: 2020

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**55. PROJECT TITLE:** Energy efficient magnetoelectric materials by ionic approaches: fundamentals, challenges and perspectives

**FINANCIAL ENTITY:** Wilhelm and Else Heraeus Foundation (WE)-Heraeus seminars (scientific conference) (10.000 €).

**LENGTH:** FROM: 2019 TO: 2020

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**56. PROJECT TITLE:** Magnetic switch controlled with voltage (MAGIC-SWITCH)

**FINANCIAL ENTITY:** European Research Council, Proof of Concept Grant (150.000 €).

**LENGTH:** FROM: 2019 TO: 2020

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**57. PROJECT TITLE:** Strain-graded MAGnetoelectric composites based on NanoporoUS materials for information and biomedical technologies (MAGNUS)

**FINANCIAL ENTITY:** European Commission (MSCA Individual Fellowship, postdoc) (172.932 €).

**LENGTH:** FROM: 2020 TO: 2022

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort (postdoctoral researcher: Aliona Nicolenco)

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**58. PROJECT TITLE:** Electrical field control of the exchange bias effect with perpendicular magnetization using the piezoelectric substrate for spintronic devices

**FINANCIAL ENTITY:** TUBITAK grant (postdoc) (25.000 €).

**LENGTH:** FROM: 2020 TO: 2021

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort (postdoctoral researcher: Erdem Demirci)

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**59. PROJECT TITLE:** BIOfilm-REsistant Materials for hard tissue Implant Applications', 'BIOREMIA'

**FINANCIAL ENTITY:** European Commission (European Training Network: 4.029.973 €; Budget to our Group: 501.809 €).

**LENGTH:** FROM: 2020 TO: 2023

**PRINCIPAL INVESTIGATOR:** Prof. Mariana Calin (PI at UAB: Prof. Jordi Sort)

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**60. PROJECT TITLE:** Advanced magnetoelectric procedures for energy efficient and sustainable technologies (MAGYTECH)

**FINANCIAL ENTITY:** Agencia Estatal de Investigación (Proyecto Retos para la Sociedad) (417.450€); Budget to our Group: 344.850 €

**LENGTH:** FROM: 2021 TO: 2025

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**61. PROJECT TITLE:** Energy-efficient and robust magneto-ionic memory device (NEURO-MAG)

**FINANCIAL ENTITY:** Agencia Estatal de Investigación (Prueba de Concepto) 149.500 €; Budget to our Group: 115.000 €

**LENGTH:** FROM: 2021 TO: 2023

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**62. PROJECT TITLE:** Ni-based ferromagnetic coatings with enhanced efficiency to replace Pt in energy and digital storage applications (Nickeffect)

**FINANCIAL ENTITY:** European Commission (HORIZON-CL4-2021-RESILIENCE-01-12) (4.844.680 €); Budget to our Group: 419.092 €

**LENGTH:** FROM: 2022 TO: 2026

**PRINCIPAL INVESTIGATOR:** Dr. Maria Lekka

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**63. PROJECT TITLE:** Voltage-Reconfigurable Magnetic Invisibility: A New Concept for Data Security Based on Engineered Magnetoelectric Materials (REMINDS)

**FINANCIAL ENTITY:** European Research Council, Advanced Grant (2.499.940 €)

**LENGTH:** FROM: 2022 TO: 2027

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**64. PROJECT TITLE:** Efectos magnetoeléctricos y magneto-iónicos estimulados por luz

**FINANCIAL ENTITY:** Agencia Estatal de Investigación (Proyectos Estratégicos Orientados a la Transición Ecológica y a la Transición Digital. Convocatoria 2021). (359.950 €); Budget to our Group: 164.450 €.

**LENGTH:** FROM: 2022 TO: 2024

**PRINCIPAL INVESTIGATOR:** Dr. Ignasi Fina (PI at UAB: Prof. Jordi Sort)

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**65. PROJECT TITLE:** Electrochemical studies and upscaling of electrodeposited nickel-based alloy thin films and nanoparticles

**FINANCIAL ENTITY:** Agencia Estatal de Investigación (Proyectos Margarita Salas). (67.200 €).

**LENGTH:** FROM: 2022 TO: 2024

**PRINCIPAL INVESTIGATOR:** Dr. Konrad Eiler

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**66. PROJECT TITLE:** Ion programmable magnetoelectricity for brain-inspired functionalities (iBRAIN)

**FINANCIAL ENTITY:** Agencia Estatal de Investigación (Proyectos Agencia Estatal de Investigación, Consolidación (CNS2022-135230)). (191.002 €).

**LENGTH:** FROM: 2023 TO: 2025

**PRINCIPAL INVESTIGATOR:** Dr. Enric Menéndez

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**67. PROJECT TITLE:** Grup de Recerca Consolidat

**FINANCIAL ENTITY:** AGAUR (2021-SGR-00651). (60.000 €).  
**LENGTH:** FROM: 2022 TO: 2025  
**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**68. PROJECT TITLE:** Nanoscaled hybrid magnetic materials: new key actors unleashing solar overall water splitting  
**FINANCIAL ENTITY:** AGAUR (2023CLIMA00022)). (251.640 €).  
**LENGTH:** FROM: 2024 TO: 2026  
**PRINCIPAL INVESTIGATOR:** Dr. Marta Estrader

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**69. PROJECT TITLE:** DOctoral training programme in Functional Advanced Materials: Towards a Better Future (DOCFAM+)  
**FINANCIAL ENTITY:** European Commission (CoFUND). Budget to our group: Personnel grant.  
**LENGTH:** FROM: 2025 TO: 2029  
**PRINCIPAL INVESTIGATOR:** Dr. Aitor Lopeandía (local PI)

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**70. PROJECT TITLE:** A Training Programme on 5R's implementation in the design, manufacturing and application of micro and nanorobotic platforms (GREENS)  
**FINANCIAL ENTITY:** European Commission (Doctoral Network) (4.031.589 €). Budget to our group: 251.971 €.  
**LENGTH:** FROM: 2025 TO: 2029  
**PRINCIPAL INVESTIGATOR:** Dr. Maria Guix

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**71. PROJECT TITLE:** Advanced Multi-purpose X-ray Diffraction System  
**FINANCIAL ENTITY:** Agencia Estatal de Investigación (SUBPROGRAMA ESTATAL DE INFRAESTRUCTURAS Y EQUIPAMIENTO CIENTÍFICO-TÉCNICO) (366.049 €).  
**LENGTH:** FROM: 2025 TO: 2026  
**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**72. PROJECT TITLE:** Magneto-ionic data-security device integrated on flexible substrates (SECURE-FLEXIMAG)  
**FINANCIAL ENTITY:** European Research Council (Proof of Concept Grant) (150.000 €).  
**LENGTH:** FROM: 2025 TO: 2026  
**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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**73. PROJECT TITLE:** PHYsics for a greener world: fostering the NExt generation of talented young researchers in novel materials, innovative STRategies and energy solutions (Phynest)  
**FINANCIAL ENTITY:** European Commission (Co-FUND) (total funding 3.960.000 €). Funding to our group: 316.800€).  
**LENGTH:** FROM: 2026 TO: 2030  
**PRINCIPAL INVESTIGATOR:** Prof. Eva Pellicer

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**74. PROJECT TITLE:** Strategies for Healing Implant-associated infections and Enhancing Longevity in Devices (SHIELD)  
**FINANCIAL ENTITY:** European Commission (Doctoral Network) (4.725.090 €). Budget to our group: 282.188 €.  
**LENGTH:** FROM: 2025 TO: 2028  
**PRINCIPAL INVESTIGATOR:** Prof. Margarita Trobos

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**75. PROJECT TITLE:** Enabling magneto-ionics for information technologies: secure and energy-efficient data storage and advanced computing (MAG-IONICS)

**FINANCIAL ENTITY:** Agencia Estatal de Investigación (Generación del Conocimiento) (268.750€)

**LENGTH:** FROM: 2025 TO: 2028

**PRINCIPAL INVESTIGATOR:** Prof. Jordi Sort

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## Patents and Utility Models

**1. INVENTORS:** J. Nogués, J. Sort, X. Amils, S. Suriñach, J. S. Muñoz, M. D. Baró  
**TITLE:** Procedimiento para aumentar la coercitividad de materiales ferromagnéticos y ferrimagnéticos

**APPLICATION FORM No:** P-P9900869IM

**PRIORITY COUNTRY:** Spain **PRIORITY DATE:** 27<sup>th</sup> April 1999

**HOLDER ENTITY:** Universitat Autònoma de Barcelona

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**2. INVENTORS:** J. Sort, J. Nogués, A. Concustell, E. Menéndez, S. Suriñach, M.D. Baró

**TITLE:** Procedimiento para la fabricación de un artículo con zonas ferromagnéticas y zonas no ferromagnéticas

**APPLICATION FORM:** P200600426

**PRIORITY COUNTRY:** Spain

**PRIORITY DATE:** 17<sup>th</sup> February 2006

**HOLDER ENTITY:** Universitat Autònoma de Barcelona /ICREA

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**3. INVENTORS:** G. Mulas, S. Garroni, E. Tolu, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Mesoporous, highly ordered magnesium and niobium based ternary oxide compound, process for its preparation thereof and uses.

**APPLICATION FORM:** PCT/IT2013/000179

**PRIORITY COUNTRY:** European Union

**PRIORITY DATE:** 24<sup>th</sup> July 2013

**HOLDER ENTITY:** Università degli Studi di Sassari/Universitat Autònoma de Barcelona /ICREA

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**4. INVENTORS:** I. Chavez, J. Zhang, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Magnetic-electrocatalytic, pseudo-ordered mesoporous alloy films, a method for making them and their use

**APPLICATION FORM:** EP17170317.6; 1707453.5 (UK); 201700590 (ES)

**PRIORITY COUNTRY:** Spain, UK, European Union

**PRIORITY DATE:** 10<sup>th</sup> May 2017

**HOLDER ENTITY:** Universitat Autònoma de Barcelona /ICREA

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**5. INVENTORS:** J. Sort, E. Pellicer, I. Chávez, A. Quintana, J. Nogués

**TITLE:** A method for tuning the magnetic coercivity of a nanoporous film, a device and uses thereof

**APPLICATION FORM:** EP16167561.6; PCT/EP2018/061900

**PRIORITY COUNTRY:** Spain

**PRIORITY DATE:** 28<sup>th</sup> April 2016

**HOLDER ENTITY:** Universitat Autònoma de Barcelona /ICREA

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**6. INVENTORS:** J. Sort, E. Menéndez, V. Sireus, A. Nicolenco, M. Cialone, J. de Rojas, G. Rius

**TITLE:** A magnetoelectric device and uses of the magnetoelectric device

**APPLICATION FORM:** EP20382628; PCT/EP2021/060062

**PRIORITY COUNTRY:** Spain

**PRIORITY DATE:** 14<sup>th</sup> July 2020

**HOLDER ENTITY:** Universitat Autònoma de Barcelona /ICREA/CSIC

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**7. INVENTORS:** A. Nicolenco, A. Salicio Paz, M. Lekka, E. García-Lecina, F. Alcaide, E. Pellicer, J. Sort, K. Eiler, R. de Paz

**TITLE:** Ni-Based porous electrode for water electrolysis and the preparation method thereof

**APPLICATION FORM:** EP23383374.8

**PRIORITY COUNTRY:** Spain

**PRIORITY DATE:** 22<sup>nd</sup> December 2023

**HOLDER ENTITY:** Universitat Autònoma de Barcelona /ICREA/CIDETEC

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**8. INVENTORS:** I. Spasojevic, F. Celegato, A. Magni, P. Tiberto, J. Sort

**TITLE:** A magneto-ionic device for data security, authentication and advanced computing

**APPLICATION FORM:** EP25382662

**PRIORITY COUNTRY:** Spain

**PRIORITY DATE:** 27<sup>th</sup> June 2025

**HOLDER ENTITY:** Universitat Autònoma de Barcelona /ICREA/INRIM

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Besides these patents, our group has “**non-disclosure agreements**” with the Fábrika Nacional de Moneda y Timbre (since 2018) and Zubi Labs Impact S.L. (since 2024).

## Publications

### ISI Web of Science Indicators

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Key: B = full book, CB= chapter of book, A = article, R = review, E = editor

(\*) Corresponding author (when applicable)

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**1- AUTHORS (in order of authorship):** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** Room-temperature coercivity enhancement in mechanically alloyed antiferromagnetic-ferromagnetic powders

**JOURNAL/BOOK TITLE:** Applied Physics Letters, 75 (1999) 3177      **KEY:** A

**DATE OF PUBLICATION:** 1999

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR :** 4.184, classified as n° 3/67 in the category Physics: Applied.

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**2- AUTHORS (in order of authorship):** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** Correlation between the microstructure and enhanced room temperature coercivity in ball milled ferromagnetic-antiferromagnetic composites

**JOURNAL/BOOK TITLE:** Materials Science Forum, 343 (2000) 812      **KEY:** A

**DATE OF PUBLICATION:** 2000

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X

**IMPACT FACTOR** : 0.597 classified as nº 78/166 in the category Materials Science: Multidisciplinary

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**3- AUTHORS (in order of authorship):** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** Room-temperature coercivity enhancement in mechanically milled ferromagnetic-antiferromagnetic composites

**JOURNAL/BOOK TITLE:** Mat. Res. Soc. Symp. Proc., 581 (2000) 641.      **KEY:** CB

**DATE OF PUBLICATION:** 2000

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X      **IMPACT FACTOR** : --

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**4- AUTHORS (in order of authorship):** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** Room temperature magnetic hardening in mechanically milled ferromagnetic-antiferromagnetic composites

**JOURNAL/BOOK TITLE:** Journal of Magnetism and Magnetic Materials 219 (2000) 53.

**KEY:** A

**DATE OF PUBLICATION:** 2000

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 0.996 classified as nº 39/166 in the category Materials Science: Multidisciplinary

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**5- AUTHORS (in order of authorship):** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** Enduriment magnetic induït per l'acoblament de material ferromagnètic i antiferromagnètic

**JOURNAL/BOOK TITLE:** Revista de Física, 2 (2000) 16      **KEY:** A

**DATE OF PUBLICATION:** 2000

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X      **IMPACT FACTOR** :

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**6- AUTHORS (in order of authorship):** Ll. Casas, A. Roig, E. Rodríguez, E. Molins, J. Tejada, J. Sort

**TITLE:** Silica Aerogel-Iron Oxide Nanocomposites: Structural and Magnetic Properties

**JOURNAL/BOOK TITLE:** Journal of Non-Crystalline Solids, 285 (2001) 37

**KEY:** A

**DATE OF PUBLICATION:** 2001

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO       **IMPACT FACTOR** : 1.363

classified as nº 2/24 in the category Materials Science: Ceramics

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**7- AUTHORS (in order of authorship):** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró, E. Chappel, F. Dupont, G. Chouteau.

**TITLE:** Coercivity and squareness enhancement in ball milled hard magnetic-antiferromagnetic composites

**JOURNAL/BOOK TITLE:** Applied Physics Letters 79 (2001) 1142

**KEY:** A

**DATE OF PUBLICATION:** 2001

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.849, classified as n° 2/71 in the category Physics: Applied.

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**8- AUTHORS (in order of authorship):** M. Rico, J. Sort, M. D. Baró, S. Suriñach, J. M. Greneche, J. A. Pérez- Alcázar **TITLE:** Analisis estructural de la serie  $Fe_{60}Mn_{10}Al_{30-x}B_x$  ( $2 \leq x \leq 10$ ) preparada por aleado mecánico

**JOURNAL/BOOK TITLE:** Revista Colombiana de Fisica 33, (2001) 131.

**KEY:** A

**DATE OF PUBLICATION:** 2001

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** :

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**9- AUTHORS (in order of authorship):** J. Sort, J. Nogués, S. Suriñach, J. S. Muñoz, E. Chappel, F. Dupont, G. Chouteau, M. D. Baró

**TITLE:** Structural and Magnetic Characterization of High-Coercive Ball-Milled Hard Magnetic ( $SmCo_5$ )+Antiferromagnetic (NiO) Composites

**JOURNAL/BOOK TITLE:** Materials Science Forum 368-388 (2002) 465. **KEY:** A

**DATE OF PUBLICATION:** 2002

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 0.613 classified as n° 90/173 in the category Materials Science: Multidisciplinary

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**10- AUTHORS (in order of authorship):** M.M. Rico, J. Sort, S. Suriñach, J.S. Muñoz, J.M. Greneche, G.A. Pérez-Alcázar, M.D. Baró

**TITLE:** Influence of the B content on the structural and magnetic properties of  $Fe_{60}Mn_{10}Al_{30-x}B_x$  prepared by mechanical alloying

**JOURNAL/BOOK TITLE:** Materials Science Forum 368-388 (2002) 497 **KEY:** A

**DATE OF PUBLICATION:** 2002

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 0.613 classified as n° 90/173 in the category Materials Science: Multidisciplinary

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**11- AUTHORS (in order of authorship):** J. Sort, J. Nogués, S. Suriñach, J. S. Muñoz, G. Chouteau, M. D. Baró

**TITLE:** Effect of magnetic interactions on the magnetic properties of ball-milled  $SmCo_5 + NiO$  powders

**JOURNAL/BOOK TITLE:** Journal of Magnetism and Magnetic Materials 242-245 (2002) 1287 **KEY:** A

**DATE OF PUBLICATION:** 2002

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.046 classified as n° 54/173 in the category Materials Science: Multidisciplinary

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**12- AUTHORS (in order of authorship):** J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J. Nogués, G. Chouteau, V. Skumryev, G.C. Hadjipanayis  
**TITLE:** Improving the energy product of hard magnetic materials  
**JOURNAL/BOOK TITLE:** Physical Review B 65 (2002) 174420  
**KEY:** A  
**DATE OF PUBLICATION:** 2002  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.327  
classified as nº 5/56 in the category Physics: Condensed Matter

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**13- AUTHORS (in order of authorship):** J. Sort, N. Mateescu, J. Nogués, S. Suriñach, M.D. Baró  
**TITLE:** Effect of the milling energy on the milling-induced hpc-fcc cobalt allotropic transformations  
**JOURNAL/BOOK TITLE:** Journal of Metastable and Nanocrystalline Materials 12 (2002) 126  
**KEY:** A  
**DATE OF PUBLICATION:** 2002  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** :

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**14- AUTHORS (in order of authorship):** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** Coercivity enhancement in ball-milled and heat-treated Sr-ferrite with iron sulphide  
**JOURNAL/BOOK TITLE:** Journal of Metastable and Nanocrystalline Materials 15-16 (2003) 599  
**KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** :

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**15- AUTHORS (in order of authorship):** J. Sort, J. Nogués, S. Suriñach, M.D. Baró  
**TITLE:** Microstructural aspects of the hcp-fcc allotropic phase transformation induced in cobalt by ball-milling  
**JOURNAL/BOOK TITLE:** Philosophical Magazine 83 (2003) 439 **KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 1.629  
classified as nº 4/69 in the category Metallurgy and Metallurgical Engineering

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**16- AUTHORS (in order of authorship):** J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J. Nogués, S. de Brion, G. Chouteau  
**TITLE:** Microstructural Magnetic interactions effects on the hard magnetic properties of ball-milled SmCo<sub>5</sub> + NiO and SmCo<sub>5</sub> + CoO composites: a  $\Delta M$  plot study  
**JOURNAL/BOOK TITLE:** Journal of Applied Physics 93 (2003) 8140  
**KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.171,  
classified as nº 5/71 in the category Physics: Applied

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**17- AUTHORS (in order of authorship):** J. Nogués, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J.F. Bobo; U. Lüders; E. Haanappel; M.R. Fitzsimmons; A. Hoffmann; J.W. Cai  
**TITLE:** Isothermal tuning of exchange bias using pulse fields  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 82 (2003) 3044      **KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 4.049, classified as nº 3/71 in the category Applied Physics

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**18- AUTHORS (in order of authorship):** M. Gich, Ll.Casas, A. Roig , E. Molins, J. Sort, S. Suriñach, M.D. Baró, J.S. Muñoz, L. Morellon, M.R. Ibarra, J. Nogués  
**TITLE:** High coercivity ultralight transparent magnets  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 82 (2003) 4307      **KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 4.049, classified as nº 3/71 in the category Physics: Applied.

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**19- AUTHORS (in order of authorship):** J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, M. Wojcik, E. Jedryka, S. Nadolski, N. Sheludko, J. Nogués  
**TITLE:** Role of staking faults in the structural and magnetic properties of ball milled cobalt  
**JOURNAL/BOOK TITLE:** Physical Review B 68 (2003) 014421      **KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 2.962, classified as nº 5/56 in the category Physics: Condensed Matter.

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**20\*- AUTHORS (in order of authorship):** F. Garcia, J. Sort, B. Rodmacq, S. Auffret, B. Dieny  
**TITLE:** Large anomalous enhancement of perpendicular exchange bias by introduction of a non-magnetic spacer between the ferromagnetic and antiferromagnetic layers  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 83 (2003) 3537      **KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 4.049, classified as nº 3/71 in the category Physics: Applied

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**21- AUTHORS (in order of authorship):** J. Sort, A. Zhilyaev, M. Zielinska, J. Nogués, S. Suriñach, J. Thibault, M.D. Baró  
**TITLE:** Microstructural effects and large microhardness in cobalt processed by high pressure torsion consolidation of ball milled powders  
**JOURNAL/BOOK TITLE:** Acta Materialia 51 (2003) 6385      **KEY:** A  
**DATE OF PUBLICATION:** 2003  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 3.059, classified as nº 1/69 in the category Metallurgy and Metallurgical Engineering.

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**22\*- AUTHORS (in order of authorship):** J. Sort, B. Rodmacq, S. Auffret, B. Dieny  
**TITLE:** Pinned synthetic ferrimagnets with perpendicular anisotropy and tunable exchange bias  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 83 (2003) 1800      **KEY:** A  
**DATE OF PUBLICATION:** 2003

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 4.049, classified as n° 3/71 in the category Physics: Applied

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**23- AUTHORS (in order of authorship):** M. Popovici, A. Roig, Ll. Casas, M. Gich, E. Molins, C. Savii, D. Becherescu, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J. Nogués  
**TITLE:** Ultra-porous iron oxide-silica nanostructured aerogels from iron(II) precursors  
**JOURNAL/BOOK TITLE:** Langmuir 20 (2004), 1425 **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.098, classified as n° 22/99 in the category Chemistry, Physical

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**24- AUTHORS (in order of authorship):** J. Sort, D. C. Ile, A. Zhilyaev, A. Concustell, T. Czeppe, S. Suriñach, M. Stoica, J. Eckert, M. D. Baró  
**TITLE:** Cold-consolidation of ball-milled Fe-based amorphous ribbons by high pressure torsion  
**JOURNAL/BOOK TITLE:** Scripta Materialia 50 (2004) 1221 **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 1.633, classified as n° 3/69 in the category Metallurgy and Metallurgical Engineering

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**25\*- AUTHORS (in order of authorship):** J. Sort, V. Langlais, S. Doppiu, B. Dieny, S. Suriñach, J. S. Muñoz, M. D. Baró, Ch. Laurent, J. Nogués  
**TITLE:** Exchange bias effects in Fe nanoparticles embedded in an antiferromagnetic Cr<sub>2</sub>O<sub>3</sub> matrix  
**JOURNAL/BOOK TITLE:** Nanotechnology 15 (2004) S211 **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.304, classified as n° 23/173 in the category Materials Science: Multidisciplinary

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**26\*- AUTHORS (in order of authorship):** J. Sort, B. Rodmacq, S. Auffret, B. Dieny  
**TITLE:** Thermal stability of synthetic ferrimagnets with perpendicular-to-plane anisotropy  
**JOURNAL/BOOK TITLE:** Journal of Applied Physics 95 (2004) 7163 **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.171, classified as n° 13/76 in the category Physics: Applied

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**27\*- AUTHORS (in order of authorship):** J. Sort, H. Glaczynska, U. Ebels, M. Giersig, J. Rybczynski, B. Dieny  
**TITLE:** Exchange bias effects in nanosized dots prepared by nanosphere lithography  
**JOURNAL/BOOK TITLE:** Journal of Applied Physics 95 (2004) 7516 **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.171, classified as n° 13/76 in the category Physics: Applied

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**28\*- AUTHORS (in order of authorship):** J. Sort, B. Dieny, M. Fraune, C. König, B. Beschoten, G. Güntherodt,  
**TITLE:** Perpendicular exchange bias in antiferromagnetic-ferromagnetic nanostructures  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 84 (2004) 3696      **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 4.049, classified as n° 3/76 in the category Physics: Applied

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**29- AUTHORS (in order of authorship):** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** Correlation between stacking fault formation, allotropic phase transformations and magnetic properties of ball-milled cobalt  
**JOURNAL/BOOK TITLE:** Materials Science Engineering A 375-377 (2004) 869      **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 1.365, classified as n° 43/177 in the category Materials Science: Multidisciplinary

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**30\*- AUTHORS (in order of authorship):** J. Sort, F. Garcia, B. Rodmacq, S. Auffret, B. Dieny  
**TITLE:** Enhancement of exchange bias through a non-magnetic spacer  
**JOURNAL/BOOK TITLE:** Journal of Magnetism and Magnetic Materials 272-276 (2004) 355  
**KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES     NO X      **IMPACT FACTOR** : 0.92, classified as n° 74/177 in the category Materials Science: Multidisciplinary

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**31- AUTHORS (in order of authorship):** J.S. Micha, B. Dieny, J.F. Jacquot, J.R. Régnard, J. Sort  
**TITLE:** Estimation of the Co nanoparticles size by magnetic measurements in Co/SiO<sub>2</sub> discontinuous multilayers  
**JOURNAL/BOOK TITLE:** Journal of Magnetism and Magnetic Materials 272-276 (2004) E967  
**KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES     NO X      **IMPACT FACTOR** : 0.92, classified as n° 74/177 in the category Materials Science: Multidisciplinary

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**32\*- AUTHORS (in order of authorship):** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny  
**TITLE:** Size effects on exchange bias in sub-100 ferromagnetic-antiferromagnetic dots deposited on pre-patterned substrates  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 84 (2004) 4923      **KEY:** A  
**DATE OF PUBLICATION:** 2004  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 4.049, classified as n° 3/76 in the category Physics: Applied

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**33\*- AUTHORS (in order of authorship):** J. Sort, A. Popa, B. Rodmacq, B. Dieny  
**TITLE:** Exchange bias properties in permalloy deposited onto a Pt/Co multilayer  
**JOURNAL/BOOK TITLE:** Physical Review B 70 (2004) 174431      **KEY:** A

**DATE OF PUBLICATION:** 2004

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.962  
classified as n° 6/57 in the category Physics: Condensed Matter

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**34- AUTHORS (in order of authorship):** M. Popovici, M. Gich, D. Nižňanský, A. Roig, C. Savii, L. Casas, E. Molins, K. Zaveta, C. Enache, J. Sort, S. de Brion, G. Chouteau, J. Nogués  
**TITLE:** Optimized synthesis of the elusive  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> phase by sol-gel chemistry  
**JOURNAL/BOOK TITLE:** Chemistry of Materials 16 (2004) 5542 **KEY:** A  
**DATE OF PUBLICATION:** 2004

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 4.374  
classified as n° 8/101 in the category Chemistry: Physical

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**35\*- AUTHORS (in order of authorship):** S. Doppiu, V. Langlais, J. Sort, S. Suriñach, M. D. Baró, Y. Zhang, G. Hadjipanayis, J. Nogués  
**TITLE:** Controlled Reduction of NiO using reactive ball milling under hydrogen atmosphere leading to Ni-NiO composites  
**JOURNAL/BOOK TITLE:** Chemistry of Materials 16 (2004) 5664 **KEY:** A  
**DATE OF PUBLICATION:** 2004

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 4.374  
classified as n° 8/101 in the category Chemistry: Physical

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**36- AUTHORS (in order of authorship):** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny  
**TITLE:** Tailoring size effects on the Exchange Bias in Ferromagnetic–Antiferromagnetic < 100 nm Nanostructures  
**JOURNAL/BOOK TITLE:** Physical Review Letters 94 (2005) 117201 **KEY:** A  
**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 7.035  
classified as n° 4/68 in the category Physics: Multidisciplinary

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**37\*- AUTHORS (in order of authorship):** J. Sort, V. Baltz, F. Garcia, B. Rodmacq, B. Dieny,  
**TITLE:** Tailoring perpendicular exchange bias in [Pt/Co] - IrMn multilayers  
**JOURNAL/BOOK TITLE:** Physical Review B 71 (2005) 054411 **KEY:** A  
**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.962  
classified as n° 6/57 in the category Physics: Condensed Matter

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**38- AUTHORS (in order of authorship):** F. Romanens, S. Pizzini, J. Sort, F. Garcia, J. Camarero, F. Yokaichiya, Y. Pennec, J. Vogel, B. Dieny  
**TITLE:** Magnetic relaxation measurements of exchange biased (Pt/Co) multilayers with perpendicular anisotropy  
**JOURNAL/BOOK TITLE:** European Physical Journal B 45 (2005) 185. **KEY:** A  
**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.457  
classified as n° 16/57 en la categoría de Physics: Condensed Matter

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**39- AUTHORS (in order of authorship):** J. Nogués, J. Sort, V. Skumryev, V. Langlais, S. Doppiu, Ch. Laurent, B. Dieny, J.S. Muñoz, S. Suriñach, M.D. Baró, S. Stoyanov, Y. Zhang, G. Hadjipanayis, S. de Brion, G. Chouteau, D. Givord

**TITLE:** Exchange bias in ferromagnetic nanoparticles embedded in an antiferromagnetic matrix

**JOURNAL/BOOK TITLE:** International Journal of Nanotechnology 2 (2005) 23

**KEY:** R

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR : --**

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**40- AUTHORS (in order of authorship):** B. Baretzky, M. D. Baró, G. P. Grabovetskaya J. Gubicza, M. B. Ivanov, Yu. R. Kolobov, T. G. Langdon, J. Lendvai, A. G. Lipnitskii, A. A. Mazilkin, A. A. Nazarov, J. Nogués, A. Ovidko, S. G. Protasova, G. I. Raab, Á. Révész, J. Sort, M. J. Starink, B. B. Straumal, S. Suriñach, T. Ungár, A. P. Zhilyaev

**TITLE:** Fundamentals of interface phenomena in advanced bulk nanoscale materials

**JOURNAL/BOOK TITLE:** Reviews on Advanced Materials Science 9 (2005) 45 **KEY:** R

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR : --**

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**41\*- AUTHORS (in order of authorship):** J. Sort, F. Garcia, S. Auffret, B. Rodmacq, B. Dieny, V. Langlais, S. Suriñach, J. S. Muñoz, M. D. Baró, J. Nogués

**TITLE:** Using exchange bias to extend the temperature range of square loop behaviour in [Pt/Co] multilayers with perpendicular anisotropy

**JOURNAL/BOOK TITLE:** Applied Physics Letters 87 (2005) 242504 **KEY:** A

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR : 4.127,**  
classified as n° 4/83 in the category Physics: Applied

**TOTAL NUMBER OF TIMES CITED:** 6

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**42\*- AUTHORS (in order of authorship):** M. Gich, A. Roig, C. Frontera, E. Molins, J. Sort, M. Popovici, G. Chouteau, D. Martín y Marero, J. Nogués

**TITLE:** Large coercivity and low temperature magnetic reorientation in  $\varepsilon$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles

**JOURNAL/BOOK TITLE:** Journal of Applied Physics 98 (2005) 044307 **KEY:** A

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR : 2.498,**  
classified as n° 13/83 in the category Physics: Applied

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**43- AUTHORS (in order of authorship):** A. Concustell, J. Sort, G. Alcalá, S. Mato, A. Gebert, J. Eckert, M. D. Baró

**TITLE:** Plastic deformation and mechanical softening of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> bulk metallic glass during nanoindentation

**JOURNAL/BOOK TITLE:** Journal of Materials Research 20 (2005) 2719 **KEY:** A

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR : 2.104**  
classified as n° 28/178 in the category Materials Science: Multidisciplinary

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**44\*- AUTHORS (in order of authorship):** J. Sort, A. Hoffmann, S. H. Chung, K. Buchanan, M. Grimsditch, M. D. Baró, B. Dieny, J. Nogués  
**TITLE:** Magnetization Reversal in Submicron Disks: Exchange biased vortices  
**JOURNAL/BOOK TITLE:** Physical Review Letters 95 (2005) 067201      **KEY:** A  
**DATE OF PUBLICATION:** 2005  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 7.489, classified as nº 4/69 in the category Physics: Multidisciplinary

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**45- AUTHORS (in order of authorship):** J. Camarero, J. Sort, A. Hoffmann, J. M. García-Martín, B. Dieny, R. Miranda, J. Nogués  
**TITLE:** Origin of the asymmetric magnetization reversal behavior in exchange-biased systems: Competing anisotropies  
**JOURNAL/BOOK TITLE:** Physical Review Letters 95 (2005) 057204      **KEY:** A  
**DATE OF PUBLICATION:** 2005  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 7.489, classified as nº 4/69 in the category Physics: Multidisciplinary

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**46\*- AUTHORS (in order of authorship):** S. Brück, J. Sort, V. Baltz, S. Suriñach, J. S. Muñoz, B. Dieny, M. D. Baró, J. Nogués  
**TITLE:** Exploiting exchange bias length scales to fully tailor double-shifted hysteresis loops  
**JOURNAL/BOOK TITLE:** Advanced Materials (2005) 17, 2978      **KEY:** A  
**DATE OF PUBLICATION:** 2005  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 9.107, classified as nº 5/178 in the category Materials Science: Multidisciplinary

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**47- AUTHORS (in order of authorship):** J. Sort, S. Suriñach, M. D. Baró, D. Muraviev, V. Skumryev, J. Nogués  
**TITLE:** Direct synthesis of isolated L1<sub>0</sub> FePt nanoparticles in a robust TiO<sub>2</sub> matrix via a combined sol-gel / pyrolysis route  
**JOURNAL/BOOK TITLE:** Advanced Materials (2006) 18, 466      **KEY:** A  
**DATE OF PUBLICATION:** 2006  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 9.107, classified as nº 5/178 in the category Materials Science: Multidisciplinary

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**48- AUTHORS (in order of authorship):** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny  
**TITLE:** Thermal activation effects in the exchange bias of sub-100 nm ferromagnetic-antiferromagnetic nanostructures  
**JOURNAL/BOOK TITLE:** Physical Review B 72 (2005) 104419      **KEY:** A  
**DATE OF PUBLICATION:** 2005  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 3.185, classified as nº 7/60 in the category Physics: Condensed Matter.

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**49\*- AUTHORS (in order of authorship):** J. Sort, B. Dieny, J. Nogués

**TITLE:** Exchange Bias in Antiferromagnetic–Ferromagnetic– Antiferromagnetic Structures with Out-Of-Plane Magnetization

**JOURNAL/BOOK TITLE:** Physical Review B 72 (2005) 104412

**KEY:** A

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.185,

classified as n° 7/60 in the category Physics: Condensed Matter

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**50- AUTHORS (in order of authorship):** J.Nogués, J. Sort, V. Langlais, S. Suriñach, V. Skumryev, J. S. Muñoz, M. D. Baró

**TITLE:** Exchange bias in nanostructures

**KEY:** R

**JOURNAL/BOOK TITLE:** Physics Reports Review Section of Physics Letters (2005) 422, 65

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 10.458,

classified as n° 2/69 in the category Physics: Multidisciplinary

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**51- AUTHORS (in order of authorship):** A. Concustell, J. Sort, T.G. Woodcock, A. Gimazov, S. Suriñach, A. Gebert, J. Eckert, A. P. Zhilyaev, M.D. Baró

**TITLE:** Enhanced microhardness in nanocrystalline  $Ti_{60}Cu_{14}Ni_{12}Sn_4Ta_{10}$  processed by Cu-mould casting and high pressure torsion

**JOURNAL/BOOK TITLE:** Intermetallics 14 (2006) 871

**KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.943,

classified as 4/65 in the category Metallurgy and Metallurgical Engineering

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**52- AUTHORS (in order of authorship):** F. Romanens, S. Pizzini, F. Yokaichiya, M. Bonfim, Y. Pennec, J. Camarero, J. Vogel, J. Sort, F. Garcia, B. Rodmacq, B. Dieny

**TITLE:** Magnetic relaxation of exchange biased (Pt/Co) multilayers studied by time-resolved Kerr microscopy

**JOURNAL/BOOK TITLE:** Physical Review B 72 (2005) 134410

**KEY:** A

**DATE OF PUBLICATION:** 2005

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.185,

classified as n° 7/60 in the category Physics: Condensed Matter

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**53\*- AUTHORS (in order of authorship):** J. Sort, G. Salazar-Álvarez, M. D. Baró, B. Dieny, A. Hoffmann, V. Novosad, J. Nogués

**TITLE:** Controlling magnetic vortices through exchange bias

**JOURNAL/BOOK TITLE:** Applied Physics Letters 88 (2006) 042502

**KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.977,

classified as n° 6/84 in the category Physics: Applied

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**54- AUTHORS (in order of authorship):** M. Gich, C. Frontera, A. Roig, E. Taboada, E. Molins, H. R. Rechenberg, J. D. Adrison, W. A. A. Macedo, C. Ritter, V. Hardy, J. Sort, V. Skumryev, J. Nogués

**TITLE:** High and low temperature crystal and magnetic structures of epsilon-Fe<sub>2</sub>O<sub>3</sub> and their correlation to its magnetic properties

**JOURNAL/BOOK TITLE:** Chemistry of Materials 18 (2006) 3889

**KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION :** YES X NO  **IMPACT FACTOR** : 5.104, classified as n° 12/108 in the category Chemistry: Physics

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**55\*- AUTHORS (in order of authorship):** J. Sort, K. S. Buchanan, V. Novosad, A. Hoffmann, G. Salazar-Alvarez, M. D. Baró, B. Dieny, J. Nogués

**TITLE:** Imprinting vortices into antiferromagnets

**JOURNAL/BOOK TITLE:** Physical Review Letters 97 (2006) 067201 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 7.072, classified as n° 5/68 in the category Physics: Multidisciplinary

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**56- AUTHORS (in order of authorship):** A. Concustell, J. Sort, M.D. Baró, A.L. Greer

**TITLE:** Anelastic deformation of a Pd40Cu30Ni10P20 bulk metallic glass during nanoindentation

**JOURNAL/BOOK TITLE:** Applied Physics Letters 88 (2006) 171911 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.977, classified as n° 6/84 in the category Physics: Applied

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**57- AUTHORS (in order of authorship):** A. Bollero, L. D. Buda-Prejbeanu, V. Baltz, J. Sort, B. Rodmacq, and B. Dieny

**TITLE:** Magnetic behavior of systems composed of coupled ferromagnetic bilayers with distinct anisotropy directions

**JOURNAL/BOOK TITLE:** Physical Review B 73 (2006) 144407 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.107, classified as n° 10/78 in the category Physics: Condensed Matter

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**58\*- AUTHORS (in order of authorship):** J. Sort, A. Concustell, E. Menéndez, S. Suriñach, K. V. Rao, S. C. Deevi, M. D. Baró, J. Nogués

**TITLE:** Periodic Arrays of Micrometer and Sub-micrometer Magnetic Structures Prepared by Nanoindentation of a Nonmagnetic Intermetallic Compound

**JOURNAL/BOOK TITLE:** Advanced Materials 18 (2006) 1717 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 7.896, classified as n°6/176 in the category Materials Science: Multidisciplinary

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**59- AUTHORS (in order of authorship):** J. Nogués, E. Apiñaniz, J. Sort, M. Amboage, M. d'Astuto, O. Mathon, R. Puzniak, I. Fita, J. S. Garitaonandia, S. Suriñach, J. S. Muñoz, M. D. Baró, F. Plazaola, F. Baudelet

**TITLE:** Volume expansion contribution to the magnetism of atomically disordered intermetallic alloys

**JOURNAL/BOOK TITLE:** Physical Review B 74 (2006) 024407 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.107, classified as n° 10/78 in the category Physcis: Condensed Matter

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**60\*- AUTHORS (in order of authorship):** J. Sort, A. Concustell, E. Menéndez, S. Suriñach, M. D. Baró, J. Farran, J. Nogués

**TITLE:** Selective generation of local ferromagnetism in austenitic stainless steel

**JOURNAL/BOOK TITLE:** Applied Physics Letters 89 (2006) 032509 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.977, classified as n° 6/84 in the category Physics: Applied

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**61- AUTHORS (in order of authorship):** J. Nogués, V. Skumryev, J. Sort, S. Stoyanov, D. Givord

**TITLE:** Shell driven magnetic stability in core-shell nanoparticles

**JOURNAL/BOOK TITLE:** Physical Review Letters 97 (2006) 157203 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** :7.072, classified as n° 5/68 in the category Physics: Multidisciplinary

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**62- AUTHORS (in order of authorship):** N. Van Steenberge, J. Das, A. Concustell, J. Sort, S. Suriñach, J. Eckert, M. D. Baró

**TITLE:** Influence of annealing on the microstructure and hardness of  $\text{Ti}_{67.79}\text{Fe}_{29.36}\text{Sn}_{3.85}$  nanocomposite rods

**JOURNAL/BOOK TITLE:** Scripta Materialia 55 (2006) 1087 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.161, classified as n°3/65 in the category Metallurgy and Metallurgical Engineering

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**63- AUTHORS (in order of authorship):** A. Bollero, V. Baltz, B. Rodmacq, B. Dieny, S. Landis, J. Sort

**TITLE:** Out-of-plane exchange bias properties of [Pt/Co]-IrMn bilayers sputtered on pre-patterned nanostructures

**JOURNAL/BOOK TITLE:** Applied Physics Letters 89 (2006) 152502 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** :3.977, classified as n° 6/84 in the category Physics: Applied

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**64- AUTHORS (in order of authorship):** J. Camarero, J. Miguel, J. Vogel, F. Garcia, F. Romanens, S. Pizzini, J. Sort, N.B. Brookes, B. Dieny, J. B. Goedkoop

**TITLE:** Magnetization reversal, asymmetry and role of uncompensated spins in perpendicular exchange coupled systems

**JOURNAL/BOOK TITLE:** Applied Physics Letters 89 (2006) 232507 **KEY:** A

**DATE OF PUBLICATION:** 2006

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.977, classified as n° 6/84 in the category Physics: Applied

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**65\*- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, V. Langlais, A. Zhilyaev, J. S. Muñoz, S. Suriñach, J. Nogués, M.D. Baró

**TITLE:** Cold compaction of metal-ceramic composites using high pressure torsion

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 434-435 (2007) 505

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 1.455, classified as n° 6/66 in Metallurgy and Metallurgical Engineering

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**66- AUTHORS (in order of authorship):** A. Concustell, N. Mattern, H. Wendrock, U. Kuehn, A. Gebert, J. Eckert, A. L. Greer, J. Sort, M. D. Baró

**TITLE:** Mechanical properties of a two-phase amorphous Ni-Nb-Y alloy studied by nanoindentation

**JOURNAL/BOOK TITLE:** Scripta Materialia 56 (2007) 85

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.481, classified as n° 2/66 in Metallurgy and Metallurgical Engineering

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**67- AUTHORS (in order of authorship):** G. Salazar, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Reversible post-synthesis tuning of the superparamagnetic blocking temperature of Fe<sub>2</sub>O<sub>3</sub> nanoparticles by adsorption and desorption of Co(II) ions

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry 17 (2007) 322

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 4.339, classified as n° 17/110 in the category Chemistry: Physics

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**68\*- AUTHORS (in order of authorship):** N. Van Steenberge, J. Sort, A. Concustell, J. Das, S. Suriñach, J. Eckert, M. D. Baró

**TITLE:** Dynamical Softening and Indentation Size Effects in a Zr-Based Bulk Glass-Forming Alloy: Free Volume Considerations

**JOURNAL/BOOK TITLE:** Scripta Materialia 56 (2007) 605

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.481, classified as n° 2/66 in Metallurgy and Metallurgical Engineering

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**69- AUTHORS (in order of authorship):** X. F. Han, M. Grimsditch, J. Meerschaut, A. Hoffmann, Y. Ji, J. Sort, J. Nogués, R. Divan, J. E. Pearson, D. J. Keavney

**TITLE:** Magnetic Instability Regions in Patterned Magnetic Structures: Influence of Element Shape on Magnetization Reversal Dynamics

**JOURNAL/BOOK TITLE:** Physical Review Letters 98 (2007) 147202

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 6.944, classified as n° 5/69 in the category Physics: Multidisciplinary

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**70- AUTHORS (in order of authorship):** A. Concustell, J. Sort, S. Suriñach, A. Gebert, J. Eckert, A. P. Zhilyaev, M.D. Baró

**TITLE:** Severe plastic deformation of a Ti-based nanocomposite alloy studied by nanoindentation

**JOURNAL/BOOK TITLE:** Intermetallics 15 (2007) 1038

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.219, classified as n° 3/66 in the category Metallurgy and Metallurgical Engineering

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**71\*- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, A. Concustell, S. Suriñach, J. Nogués, M. D. Baró

**TITLE:** Microstructural evolution during solid state sintering of ball-milled nanocomposite WC-10wt%Co powders

**JOURNAL/BOOK TITLE:** Nanotechnology 18 (2007) 185609

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.310, classified as n° 2/67 in the category Engineering: Multidisciplinary

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**72\*- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, S. Suriñach, M.D. Baró, J. Nogués

**TITLE:** Tailoring deformation-induced effects in Co powders by milling them with  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>

**JOURNAL/BOOK TITLE:** Journal of Materials Research 22 (2007) 2998 **KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 1.916, classified as n° 39/189 in the category Materials Science: Multidisciplinary

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**73- AUTHORS (in order of authorship):** N. Wiese, T. Dimopoulos, M. Rührig, J. Wecker, G. Reiss, J. Sort, J. Nogués

**TITLE:** Strong temperature dependence of antiferromagnetic coupling in CoFeB/Ru/CoFeB

**JOURNAL/BOOK TITLE:** Europhysics Letters 78 (2007) 67002

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.206, classified as n° 15/69 in the category Physics: Multidisciplinary

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**74- AUTHORS (in order of authorship):** G. Salazar-Álvarez, J. Sort, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Synthesis and size-dependent exchange bias in inverted core-shell MnO/Mn<sub>3</sub>O<sub>4</sub> nanoparticles

**JOURNAL/BOOK TITLE:** Journal of the American Chemical Society 129 (2007) 9102

**KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 7.885, classified as n° 7/127 in the category Chemistry: Multidisciplinary

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**75- AUTHORS (in order of authorship):** G. Salazar-Alvarez, R. T. Olsson, J. Sort, W. A. A. Macedo, J. D. Ardisson, M. D. Baró, J. Nogués

**TITLE:** Enhanced coercivity in Co-rich near stoichiometric  $\text{Co}_x\text{Fe}_{(3-x)}\text{O}_4$  nanoparticles prepared in large batches

**JOURNAL/BOOK TITLE:** Chemistry of Materials 19 (2007) 4957 **KEY:** A

**DATE OF PUBLICATION:** 2007

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 4.883, classified as n° 13/110 in the category Chemistry: Physics

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**76- AUTHORS (in order of authorship):** V. Baltz, A. Bollero, B. Rodmacq, and B. Dieny, J. Sort

**TITLE:** Comment on "Size-dependent scaling of perpendicular exchange bias in magnetic nanostructures"

**JOURNAL/BOOK TITLE:** Physical Review B 77 (2008) 017401 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.172, classified as n° 9/61 in the category Physics: Condensed Matter

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**77- AUTHORS (in order of authorship):** A. Bollero, B. Dieny, J. Sort, K. S. Buchanan, S. Landis, J. Nogués

**TITLE:** Enhanced exchange bias effects in a nanopatterned system consisting of two perpendicularly coupled ferromagnets

**JOURNAL/BOOK TITLE:** Applied Physics Letters 92 (2008) 022508 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.596, classified as n° 8/94 in the category Physics: Applied

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**78- AUTHORS (in order of authorship):** J. Nogués, V. Langlais, J. Sort, S. Doppiu, S. Suriñach, M.D. Baró

**TITLE:** Magnetic properties of Ni-NiO (ferromagnetic-antiferromagnetic) nanocomposites obtained from a partial mechanochemical reduction of NiO

**JOURNAL/BOOK TITLE:** Journal of Nanoscience and Nanotechnology 8 (2008) 2923

**KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 1.987, classified as n° 36/127 in the category Chemistry: Multidisciplinary

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**79\*- AUTHORS (in order of authorship):** J. Sort, N. Van Steenberge, A. Gimazov, A. Concustell, S. Suriñach, A. Gebert, J. Eckert, M. D. Baró

**TITLE:** Study of the mechanical behaviour of Zr-based bulk metallic glass using micro- and nano-indentation

**JOURNAL/BOOK TITLE:** The Open Materials Science Journal 2 (2008) 1 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** : --

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**80- AUTHORS (in order of authorship):** A. Hoffmann, J. Sort, K. S. Buchanan, J. Nogués

**TITLE:** Exchange-Biased Magnetic Vortices

**JOURNAL/BOOK TITLE:** IEEE Transactions on Magnetics 44 (2008) 1968 **KEY:** R

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** : 0.959,

classified as n° 60/94 in the category Physics: Applied

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**81- AUTHORS (in order of authorship):** J. Fassbender, M. O. Liedke, T. Strache, E. Menéndez, J. Sort, K. V. Rao, C. Deevi, J. Nogués

**TITLE:** Ion mass dependence of irradiation-induced local creation of ferromagnetism in Fe<sub>60</sub>Al<sub>40</sub> alloys

**JOURNAL/BOOK TITLE:** Physical Review B 77 (2008) 174430 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.172,

classified as n° 9/61 in the category Physics: Condensed Matter

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**82- AUTHORS (in order of authorship):** A.P. Zhilyaev, A. Concustell, J. Sort, A. Gimazov, S. Suriñach, M.D. Baró

**TITLE:** Ti-based composite subjected to deformation by high-pressure torsion

**JOURNAL/BOOK TITLE:** Journal of Functional Materials 1 (2008) 21 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** : --

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**83\*- AUTHORS (in order of authorship):** J. Sort, K. S. Buchanan, J. E. Pearson, A. Hoffmann, E. Menéndez, G. Salazar-Alvarez, M. D. Baró, M. Miron, B. Rodmacq, B. Dieny, J. Nogués

**TITLE:** Tailoring the magnetization reversal of elliptical dots using exchange bias (invited)

**JOURNAL/BOOK TITLE:** Journal of Applied Physics 103, 07C109 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.171,

classified as n° 17/94 in the category Physics: Applied

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**84- AUTHORS (in order of authorship):** N. Van Steenberge, A. Concustell, J. Sort, J. Das, A. Gebert, S. Suriñach, J. Eckert, M.D. Baró

**TITLE:** Microstructural inhomogeneities introduced in a Zr-based bulk metallic glass upon low-temperature annealing

**JOURNAL/BOOK TITLE:** Materials Science and Engineering A 491 (2008) 124 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** : 1.453,

classified as n° 60/189 in the category Materials Science: Multidisciplinary

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**85- AUTHORS (in order of authorship):** E. Menéndez, A. Martinavicius, M. O. Liedke, G. Abrasonis, J. Fassbender, J. Sommerlatte, K. Nielsch, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** Patterning of magnetic structures on austenitic stainless steel by local ion beam nitriding

**JOURNAL/BOOK TITLE:** Acta Materialia 56 (2008) 4570 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.624, classified as n° 1/66 in the category Metallurgy and Metallurgical Engineering

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**86\*- AUTHORS (in order of authorship):** E. Menéndez, G. Salazar-Álvarez, A. P. Zhilyaev, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** Cold consolidation of metal-ceramic nanocomposite powders with large ceramic percentages

**JOURNAL/BOOK TITLE:** Advanced Functional Materials 18 (2008) 3293 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 7.496, classified as n° 7/189 in the category Materials Science: Multidisciplinary

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**87\*- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, M. O. Liedke, J. Fassbender, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Two-fold origin of the deformation-induced ferromagnetism in bulk Fe<sub>60</sub>Al<sub>40</sub> (at.%) alloys

**JOURNAL/BOOK TITLE:** New Journal of Physics 10 (2008) 103030 **KEY:** A

**DATE OF PUBLICATION:** 2008

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.264, classified as n° 10/69 in the category Physics: Multidisciplinary

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**88\*- AUTHORS (in order of authorship):** E. Menéndez, M. O. Liedke, J. Fassbender, T. Gemming, A. Weber, L. J. Heyderman, K. V. Rao, S. C. Deevi, S. Suriñach, M. D. Baró, J. Sort, J. Nogués

**TITLE:** Direct magnetic patterning due to the generation of ferromagnetism by selective ion irradiation of paramagnetic FeAl alloys

**JOURNAL/BOOK TITLE:** Small 5 (2009) 229 **KEY:** A

**DATE OF PUBLICATION:** 2009

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 6.171, classified as n° 13/214 in the category Materials Science: multidisciplinar

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**89- AUTHORS (in order of authorship):** M. Tanase, A. K. Petford-Long, O. Heinonen, K. S. Buchanan, J. Sort, J. Nogués

**TITLE:** Magnetization reversal in circularly exchange-biased ferromagnetic disks

**JOURNAL/BOOK TITLE:** Physical Review B 79 (2009) 014436 **KEY:** A

**DATE OF PUBLICATION:** 2009

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.475, clasificada como n° 12/66 en la categoría Física: materia condensada

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**90\*- AUTHORS (in order of authorship):** J. Fornell, A. Concustell, S. Suriñach, W. H. Li, N. Cuadrado, A. Gebert, M. D. Baró, J. Sort  
**TITLE:** Yielding and intrinsic plasticity of Ti-Zr-Ni-Cu-Be bulk metallic glass  
**JOURNAL/BOOK TITLE:** International Journal of Plasticity 25 (2009) **KEY:** A  
**DATE OF PUBLICATION:** 2009  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 4.791, classified as n° 3/116 in the category Mechanical Engineering

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**91\*- AUTHORS (in order of authorship):** J. Sort, J. Fornell, W. Li, S. Suriñach and M. D. Baró  
**TITLE:** Influence of the loading rate on the indentation response of Ti-based metallic glass  
**JOURNAL/BOOK TITLE:** Journal of Materials Research 24 (2009) 918 **KEY:** A  
**DATE OF PUBLICATION:** 2009  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.667, classified as n° 72/214 in the category Materials Science Multidisciplinar

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**92\*- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, M.O. Liedke, J. Fassbender, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Controlled generation of ferromagnetic martensite from paramagnetic austenite in AISI 316L austenitic stainless steel  
**JOURNAL/BOOK TITLE:** Journal of Materials Research 24 (2009) 565 **KEY:** A  
**DATE OF PUBLICATION:** 2009  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.667, classified as n° 72/214 in the category Materials Science Multidisciplinar

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**93- AUTHORS (in order of authorship):** E. Jiménez, J. Camarero, J. M. García-Martín, J. Sort, N. Mikuszeit, A. Hoffmann, B. Dieny, J. Nogués, and R. Miranda  
**TITLE:** Emergence of noncollinear anisotropies from interfacial magnetic frustration in exchange-bias systems  
**JOURNAL/BOOK TITLE:** Physical Review B 80 (2009) 014415 **KEY:** A  
**DATE OF PUBLICATION:** 2009  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.475, classified as n° 12/66 in the category Physics: Condensed Matter

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**94- AUTHORS (in order of authorship):** A. Concustell, J. Sort, J. Fornell, E. Rossinyol, S. Suriñach, A. Gebert, J. Eckert, M. D. Baró  
**TITLE:** Work-hardening mechanisms of the Ti<sub>60</sub>Cu<sub>14</sub>Ni<sub>12</sub>Sn<sub>4</sub>Nb<sub>10</sub> nanocomposite alloy  
**JOURNAL/BOOK TITLE:** Journal of Materials Research 24 (2009) 3146 **KEY:** A  
**DATE OF PUBLICATION:**  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.667, classified as n° 72/214 in the category Materials Science: multidisciplinar

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**95\*- AUTHORS (in order of authorship):** J. Fornell, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Unconventional elastic properties, deformation behaviour and fracture characteristics of newly developed rare-earth bulk metallic glasses

**JOURNAL/BOOK TITLE:** Intermetallics 17 (2009) 1090

**KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.231, classified as n° 4/70 in the category Metallurgy and Metallurgical Engineering

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**96- AUTHORS (in order of authorship):** I.V. Golosovsky, G. German Salazar, A. López, M. A. González, J. Sort, S. Suriñach, M.D. Baró, J. Nogués

**TITLE:** Magnetic proximity effect features in antiferromagnetic/ferromagnetic core/shell nanoparticles

**JOURNAL/BOOK TITLE:** Physical Review Letters 102 (2009) 247201

**KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 7.328, classified as n° 6/71 in Physics: multidisciplinar

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**97- AUTHORS (in order of authorship):** E. Jimenez, J. Camarero, R. Miranda, J. Sort, A. Hoffmann, J. M. Garcia-Martin, B. Dieny, J. Nogués

**TITLE:** Highly asymmetric magnetic behavior in exchange biased systems induced by non-collinear field cooling

**JOURNAL/BOOK TITLE:** Applied Physics Letters 95 (2009) 122508

**KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.554, classified as n° 14/108 in the category Applied Physics

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**98\*- AUTHORS (in order of authorship):** G. Salazar-Alvarez, J. J. Kavich, J. Sort, A. Mugarza, S. Stepanow, A. Potenza, H. Marchetto, S. S. Dhesi, V. Baltz, B. Dieny, A. Webber, L. J. Heyderman, J. Nogués, P. Gambardella

**TITLE:** Direct evidence of imprinted vortex states in the antiferromagnet of exchange biased microdisks

**JOURNAL/BOOK TITLE:** Applied Physics Letters 95 (2009) 012510

**KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.554, classified as n° 14/108 in the category Applied Physics

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**99- AUTHORS (in order of authorship):** J. Nogués, S. Stepanow, A. Bollero, J. Sort, B. Dieny, F. Nolting, P. Gambardella

**TITLE:** Simultaneous in-plane and out-of-plane exchange bias using a single antiferromagnetic layer

**JOURNAL/BOOK TITLE:** Applied Physics Letters 95 (2009) 152515

**KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 3.554, classified as n° 14/108 in the category Applied Physics

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**100\*- AUTHORS (in order of authorship):** J. Fornell, E. Rossinyol, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Improvement of the mechanical properties in a Zr-based metallic glass caused by deformation-induced nanocrystallization

**JOURNAL/BOOK TITLE:** Scripta Materialia 62 (2010) 13      **KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 2.699, classified as n° 3/75 in the category Metallurgy and Metallurgical Engineering

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**101\*- AUTHORS (in order of authorship):** E. Pellicer, A. Varea, S. Pané, B. J. Nelson, E. Menéndez, M. Estrader, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** Nanocrystalline electroplated Cu-Ni: metallic thin films with enhanced mechanical properties and tuneable magnetic behaviour

**JOURNAL/BOOK TITLE:** Advanced Functional Materials 20 (2010) 983      **KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 10.179, classified as n° 10/232 in the category Materials Science Multidisciplinary

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**102- AUTHORS (in order of authorship):** S. González, J. Sort, D.V. Louzguine-Luzgin, J.H. Perepezko, M.D. Baró, A. Inoue

**TITLE:** Tuning the microstructure and mechanical properties of Al-based composites by addition of Pd

**JOURNAL/BOOK TITLE:** Intermetallics 18 (2010) 2377      **KEY:** A

**DATE OF PUBLICATION:** 2010

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 1.649, classified as n° 8/75 in the category Metallurgy and Metallurgical Engineering

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**103\*- AUTHORS (in order of authorship):** J. Sort, J. Fornell, S. Suriñach, M. D. Baró

**TITLE:** Evolution of the mechanical properties of Ti-based metallic glass during depth-sensing load-unload nanoindentation cycles

**JOURNAL/BOOK TITLE:** Nanoscience and Nanotechnology Letters 2 (2010) 298

**KEY:** A

**DATE OF PUBLICATION:** 2010

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** SI     NO X      **IMPACT FACTOR** : 0.528, classified as n° 183/232 in the category Materials Science Multidisciplinary

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**104- AUTHORS (in order of authorship):** J. Fornell, S. González, E. Rossinyol, S. Suriñach, M.D. Baró, D.V. Louzguine-Luzgin, J.H. Perepezko, J. Sort, A. Inoue

**TITLE:** Enhanced Mechanical Properties due to Structural Changes Induced by Devitrification in Fe-Co-B-Si-Nb Bulk Metallic Glass

**JOURNAL/BOOK TITLE:** Acta Materialia 58 (2010)      **KEY:** A

**DATE OF PUBLICATION:** 2010

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X    NO       **IMPACT FACTOR** : 3.755, classified as n° 1/75 in the category Metallurgy and Metallurgical Engineering

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**105- AUTHORS (in order of authorship):** E. Menéndez, J.C. Stinville, C.Tomas, C. Templier, P. Villechaise, J.P. Rivière, M. Drouet, A. Martinavicius, G. Abrasonis, J. Fassbender, M. D. Baró, J. Sort, J.Nogués

**TITLE:** Out-of-plane magnetic patterning on austenitic stainless steels using plasma nitriding  
**JOURNAL/BOOK TITLE:** Applied Physics Letters 96 (2010) 242509 **KEY:** A  
**DATE OF PUBLICATION:** 2010  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 3.844, classified as n° 17/125 in the category Applied Physics

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**106- AUTHORS (in order of authorship):** A. López-Ortega, D. Tobia, E. Winkler, I. V. Golosovsky, G. Salazar-Alvarez, S. Estradé, M. Estrader, J. Sort, M. A. González, S. Suriñach, J. Arbiol, F. Peiró, R. D. Zysler, M. D. Baró, J. Nogués  
**TITLE:** Size dependent passivation shell and magnetic properties in antiferromagnetic/ferrimagnetic, core/shell, MnO nanoparticles  
**JOURNAL/BOOK TITLE:** Journal of the American Chemical Society 132 (2010) 9398  
**KEY:** A  
**DATE OF PUBLICATION:** 2010  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 9.907, classified as n° 11/154 in the category Chemistry Multidisciplinary

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**107\*- AUTHORS (in order of authorship):** N. Van Steenberge, S. Hóbor, S. Suriñach, A. Zhilyaev, F. Houdellier, F. Momprou, M. D. Baró, Á. Révész, J. Sort  
**TITLE:** Effects of severe plastic deformation on the structure and thermo-mechanical properties of Zr<sub>55</sub>Cu<sub>30</sub>Al<sub>10</sub>Ni<sub>5</sub> bulk metallic glass  
**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 500 (2010) 61  
**KEY:** A  
**DATE OF PUBLICATION:**  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.289, classified as n° 4/75 in the category Metallurgy and Metallurgical Engineering

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**108\*- AUTHORS (in order of authorship):** J. Sort, L. F. Bonavina, A. Varea, C. Souza, W. J. Botta, C. S. Kiminami, C. Bolfarini, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Out-of-Plane Magnetic Patterning based on Indentation-Induced Nanocrystallization of a Metallic Glass  
**JOURNAL/BOOK TITLE:** Small 6 (2010) 1543 **KEY:** A  
**DATE OF PUBLICATION:** 2010  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 8.349, classified as n° 12/232 in the category Materials Science Multidisciplinary

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**109- AUTHORS (in order of authorship):** F. S. Santos, J. Sort, J. Fornell, M. D. Baró, S. Suriñach, C. Bolfarini, W. J. Botta, C. S. Kiminami  
**TITLE:** Mechanical behavior under nanoindentation of a new Ni-based glassy alloy produced by melt-spinning and copper mold casting  
**JOURNAL/BOOK TITLE:** Journal of Non-Crystalline Solids 356 (2010) 2251  
**KEY:** A  
**DATE OF PUBLICATION:** 2010  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 1.537, classified as n° 5/25 in the category Materials Science, Ceramics.

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**110\*- AUTHORS (in order of authorship):** J. Sort

**TITLE:** Vidrios metálicos: cuando el desorden estructural se convierte en una ventaja

**JOURNAL/BOOK TITLE:** Investigación y Ciencia 412 (2011) 8

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :**

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**111\*- AUTHORS (in order of authorship):** J. Fornell, M.D. Baró, S. Suriñach, A. Gebert, J. Sort

**TITLE:** Influence of the deformation-induced martensitic transformations on the mechanical properties of nanocomposite Cu-Zr-(Al) systems

**JOURNAL/BOOK TITLE:** Advanced Engineering Materials (2011) 13 (2011) 57

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 1.185, classified as n° 112/232 in the category Materials Science Multidisciplinary

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**112- AUTHORS (in order of authorship):** E. Jiménez, J. Camarero, P. Perna, N. Mikuszeit, F. J. Teran, J. Sort, J. Nogués, J. M. García-Martín, A. Hoffmann, B. Dieny, and R. Miranda

**TITLE:** Role of anisotropy configuration in exchange-biased system

**JOURNAL/BOOK TITLE:** Journal of Applied Physics (2011) 109 (2011) 07D730

**KEY:** A

**DATE OF PUBLICATION:**

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 2.168, classified as n° 37/125 in the category Applied Physics

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**113\*- AUTHORS (in order of authorship):** E. Pellicer, E. Rossinyol, M. Cabo, A. López-Ortega, M. Estrader, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** Oxide-matrix based nanocomposite materials for advanced magnetic and optical functionalities in: "Nanocomposite Materials, Theory and Applications", Intech - ISBN 978-953-307-165-7

**JOURNAL/BOOK TITLE:** Nanocomposite Materials, Theory and Applications (ed. B. S. R. Reddy), chapter 15, pp. 343-358.

**KEY:** BC

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :**

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**114\*- AUTHORS (in order of authorship):** J. Fornell, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Indentation plastic work and large compression plasticity in in-situ nanocrystallized Zr<sub>62</sub>Cu<sub>18</sub>Ni<sub>10</sub>Al<sub>10</sub> bulk metallic glass

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds (2011) 509S (2011) S87–S91

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 2.289, classified as n° 4/75 in the category Metallurgy and Metallurgical Engineering

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**115- AUTHORS (in order of authorship):** K. M. Sivaraman, O. Ergeneman, S. Pané, E. Pellicer, J. Sort, K. Shou, S. Suriñach, M. D. Baró and B. J. Nelson  
**TITLE:** Electrodeposition of cobalt - yttrium hydroxide/oxide nanocomposite films from particle-free aqueous baths containing chloride salts  
**JOURNAL/BOOK TITLE:** Electrochimica Acta 56 (2011) 5142. **KEY:** A  
**DATE OF PUBLICATION:** 2011  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 3.832, classified as nº 7/27 in the category Electrochemistry

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**116\*- AUTORS:** A. Varea, E. Menéndez, J. Montserrat, E. Lora-Tamayo, A. Weber, L. J. Heyderman, S. C. Deevi, K. V. Rao, S. Suriñach, M. D. Baró, K. S. Buchanan, J. Nogués, J. Sort  
**TÍTOL:** Tuneable magnetic patterning of paramagnetic Fe<sub>60</sub>Al<sub>40</sub> (at. %) by consecutive ion irradiation through pre-lithographed shadow masks  
**JOURNAL/BOOK TITLE:** Journal of Applied Physics 109 (2011) 093918.  
**KEY:** A  
**DATE OF PUBLICATION:** 2011  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 2.168, classified as nº 37/125 in the category Applied Physics

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**117- AUTHORS (in order of authorship):** E. Pellicer, A. Varea, S. Pané, K. M. Sivaraman, B. J. Nelson, S. Suriñach, M. D. Baró, J. Sort  
**TITLE:** A comparison between fine-grained and nanocrystalline electrodeposited Cu-Ni films. Insights on mechanical and corrosion performance  
**JOURNAL/BOOK TITLE:** Surface and Coatings Technology 205 (2011) 5285.  
**KEY:** A  
**DATE OF PUBLICATION:** 2011  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 1.867, classified as nº 5/18 in the category Materials Science, Coatings and Films.

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**118- AUTHORS (in order of authorship):** M. A. Zeeshan, K. Shou, S. Pané, E. Pellicer, J. Sort, K.M. Sivaraman, M. D. Baró, B. J. Nelson  
**TITLE:** Structural and Magnetic Characterization of Batch-Fabricated Nickel Encapsulated Multi-Walled Carbon Nanotubes  
**JOURNAL/BOOK TITLE:** Nanotechnology 22 (2011) 275713.  
**KEY:** A  
**DATE OF PUBLICATION:** 2011  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :** 3.979, classified as nº 32/232 in the category Materials Science, Multidisciplinary.

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**119\*- AUTHORS (in order of authorship):** E. Pellicer, A. Varea, S. Kartik, S. Pané, S. Suriñach, M.D. Baró, J. Nogués, B. Nelson, J. Sort  
**TITLE:** Grain boundary segregation and interdiffusion effects in nickel-copper alloys: an effective means to improve the thermal stability of nanocrystalline nickel  
**JOURNAL/BOOK TITLE:** ACS Appl. Mater. Interf. 3 (2011) 2265  
**KEY:** A  
**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 4.525, classified as n° 27/232 in the category Materials Science, Multidisciplinary.

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**120- AUTHORS (in order of authorship):** S. Pané, V. Panagiotopoulou, S. Fusco, E. Pellicer, J. Sort, D. Monacki, K. M. Sivaraman, B. E. Kratochvil, M. D. Baró, B. J. Nelson

**TITLE:** On the effects of saccharine in the Localized Electrochemical Deposition of Cu-rich Cu-Ni Circular Microtowers

**JOURNAL/BOOK TITLE:** Electrochemistry Communications 13 (2011) 973

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 4.859, classified as n° 3/27 in the category electrochemistry.

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**121- AUTHORS (in order of authorship):** S. Pané, E. Pellicer, K. M. Sivaraman, S. Suriñach, M. D. Baró, B. J. Nelson, J. Sort

**TITLE:** High-performance electrodeposited Co-rich CoNiReP permanent magnets

**JOURNAL/BOOK TITLE:** Electrochimica Acta 56 (2011) 8979 **KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR** : 3.832, classified as n° 7/27 in the category Electrochemistry

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**122- AUTHORS (in order of authorship):** D. Gebauer, V. Oliynyk, M. Salajkova, J. Sort, Q. Zhou, L. Bergström, G. Salazar-Alvarez

**TITLE:** A transparent hybrid of nanocrystalline cellulose and amorphous calcium carbonate nanoparticles

**JOURNAL/BOOK TITLE:** Nanoscale 3 (2011) 3563

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 5.914, classified as n° 18/232 in the category Materials Science, Multidisciplinary.

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**123- AUTHORS (in order of authorship):** E. Pellicer, S. Pané, K. M. Sivaraman, O. Ergeneman, S. Suriñach, M. D. Baró, B. J. Nelson, J. Sort

**TITLE:** Effects of the anion in glycine-containing electrolytes on the mechanical properties of electrodeposited Co-Ni films

**JOURNAL/BOOK TITLE:** Materials Chemistry and Physics 130 (2011) 1381

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.234, classified as n° 51/232 in the category Materials Science, Multidisciplinary

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**124- AUTHORS (in order of authorship):** J. Fornell, N. Van Steenberge, A. Varea, E. Rossinyol, E. Pellicer, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Enhanced mechanical properties and in-vitro corrosion behavior of amorphous and devitrified Ti<sub>60</sub>Zr<sub>10</sub>Cu<sub>38</sub>Pd<sub>12</sub> metallic glass

**JOURNAL/BOOK TITLE:** Journal of the Mechanical Behavior of Biomedical Materials 4 (2011), 1709. **KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.814, classified as n° 15/72 in the category Biomedical Engineering

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**125- AUTHORS (in order of authorship):** G. Salazar-Alvarez, H. Lidbaum, A. López-Ortega, M. Estrader, K. Leifer, J. Sort, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Two-, Three-, and Four-component Magnetic Multilayer Onion Nanoparticles Based on Iron Oxides and Manganese Oxides

**JOURNAL/BOOK TITLE:** Journal of the American Chemical Society 133 (2011) 16738.

**KEY:** A

**DATE OF PUBLICATION:** 2011

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 9.907, classified as n° 11/154 in the category Chemistry Multidisciplinary

**126- AUTHORS (in order of authorship):** S. González, E. Pellicer, J. Fornell, A. Blanquer, Ll. Barrios, E. Ibáñez, P. Solsona, S. Suriñach, M. D. Baró, C. Nogués, J. Sort

**TITLE:** Improved mechanical performance and delayed corrosion phenomena in biodegradable Mg-Zn-Ca alloys through Pd-alloying

**JOURNAL/BOOK TITLE:** Journal of the Mechanical Behavior of Biomedical Materials 6 (2012) 53 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.814, classified as n° 15/72 in the category Biomedical Engineering

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**127\*- AUTHORS (in order of authorship):** J. Fornell, S. González, E. Pellicer, N. Van Steenberge, P. Pérez, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Deformation and fracture behavior of corrosion-resistant, potentially biocompatible, Ti<sub>40</sub>Zr<sub>10</sub>Cu<sub>38</sub>Pd<sub>12</sub> bulk metallic glass

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 536 (2012) S74.

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.289, classified as n° 4/75 in the category Metallurgy and Metallurgical Engineering

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**128- AUTHORS (in order of authorship):** J. Fornell, N. Van Steenberge, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Influence of the Si content on the microstructure and mechanical properties of Ti-Ni-Cu-Si-Sn nanocomposite alloys

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 536 (2012) S186.

**KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR** : 2.289, classified as n° 4/75 in the category Metallurgy and Metallurgical Engineering

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**129- AUTHORS (in order of authorship):** A. Varea, E. Pellicer, S. Pané , B. J. Nelson, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Mechanical Properties and Corrosion Behaviour of Nanostructured Cu-rich CuNi Electrodeposited Films

**JOURNAL/BOOK TITLE:** International Journal of Electrochemical Science 7 (2012) 1288.

**KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR :** 3.729, classified as nº 9/27 in the category Electrochemistry

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**130- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, A. Varea, A. Concustell, S. Suriñach, J. Montserrat, E. Lora-Tamayo, M. D. Baró, J. Nogués

**TITLE:** Cuando el desorden genera magnetismo- When disorder generates magnetism

**JOURNAL/BOOK TITLE:** Revista de Física 26 (2012) 16 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR :**

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**131- AUTHORS (in order of authorship):** S. Schuerle, S. Pané, E. Pellicer, J. Sort, M. D. Baró , B. J. Nelson

**TITLE:** Helical and Tubular Lipid Microstructures Electroless-Coated with CoNiReP for Wireless Magnetic Manipulation

**JOURNAL/BOOK TITLE:** Small 8 (2012) 1498 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR :** 8.349, classified as nº 12/232 in the category Materials Science Multidisciplinary

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**132- AUTHORS (in order of authorship):** E. Pellicer, S. Pané, V. Panagiotopoulou, S. Fusco, K. M. Sivaraman, S. Suriñach, M. D. Baró, B. J. Nelson and J. Sort

**TITLE:** Localized Electrochemical Deposition of Porous Cu-Ni Microcolumns: Insights into the Growth Mechanisms and the Mechanical Performance

**JOURNAL/BOOK TITLE:** International Journal of Electrochemical Science 7 (2012) 4014.

**KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR :** 3.729, classified as nº 9/27 in the category Electrochemistry

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**133- AUTHORS (in order of authorship):** S. González, E. Pellicer, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Mechanical and corrosion behaviour of as-cast and annealed Zr<sub>60</sub>Cu<sub>20</sub>Al<sub>10</sub>Fe<sub>5</sub>Ti<sub>5</sub> bulk metallic glass

**JOURNAL/BOOK TITLE:** Intermetallics 28 (2012) 149 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR :** 1.649, classified as nº 8/75 in the category Metallurgy and Metallurgical Engineering

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**134- AUTHORS (in order of authorship):** S. González, E. Pellicer, E. Rossinyol, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Mechanical and in-vitro corrosion behaviour of Fe-containing TiNb(Zr-Fe)Ta alloys

**JOURNAL/BOOK TITLE:** Digest Journal of Nanomaterials and Biostructures 7 (2012) 641 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 1.200, classified as nº 110/232 in the category Materials Science, Multidisciplinary

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**135- AUTHORS (in order of authorship):** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, I. Golosovsky, R. Dumas, D. Keavney, M. Vasilakaki, K. N. Trohidou, J. Sort, F. Peiró, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Strongly exchange coupled inverse ferrimagnetic soft / hard,  $Mn_xFe_{3-x}O_4/Fe_xMn_{3-x}O_4$ , core / shell heterostructured nanoparticles

**JOURNAL/BOOK TITLE:** Nanoscale 4 (2012) 5138 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 5.914, classified as nº 18/232 in the category Materials Science, Multidisciplinary.

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**136\*- AUTHORS (in order of authorship):** A. Hynowska, E. Pellicer, J. Fornell, S. González, N. Van Steenberge, S. Suriñach, A. Gebert, M. Calin, J. Eckert, M. D. Baró, J. Sort

**TITLE:** Nanostructured beta-phase Ti-31.0Fe-9.0Sn and sub-micrometer structured Ti-39.3Nb-13.3Zr-10.7Ta alloys for biomedical applications: microstructure benefits on the mechanical and corrosion performances

**JOURNAL/BOOK TITLE:** Materials Science & Engineering C 32(2012) 2418.

**KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.686, classified as nº 10/25 in the category Materials Science, Biomaterials.

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**137- AUTHORS (in order of authorship):** Ll.Yedra, A. Eljarrat, R. Arenal, E. Pellicer, M.Cabo, A. López-Ortega, M. Estrader, J. Sort, M. D. Baró, S. Estradé, F. Peiró

**TITLE:** EEL spectroscopic tomography: towards a new dimension in nanomaterials analysis

**JOURNAL/BOOK TITLE:** Ultramicroscopy 122 (2012) 12. **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.471, classified as nº 3/10 in the category Microscopy.

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**138- AUTHORS (in order of authorship):** C. Schütz, J. Sort, Z. Bacsik, V. Oliynyk, E. Pellicer, A. Fall, L. Wagberg, L. Berglund, L. Bergström, G. Salazar-Alvarez

**TITLE:** Hard and transparent films formed by nanocellulose-TiO<sub>2</sub> nanoparticle hybrids

**JOURNAL/BOOK TITLE:** Plos One 7 (2012) e45828 **KEY:** A

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 4.092, classified as nº 12/85 in the category Biology.

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**139- AUTHORS (in order of authorship):** N. Tsyntsaru, H. Cesiulis, M. Donten, J. Sort, E. Pellicer, E. J. Podlaha-Murphy

**TITLE:** Modern trends in tungsten alloys electrodeposition with iron group metals

**JOURNAL/BOOK TITLE:** Surface Engineering and Applied Electrochemistry 48 (2012) 491.

**KEY:** R

**DATE OF PUBLICATION:** 2012

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 0.332, classified as n° 27/27 in the category Electrochemistry.

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**140- AUTHORS (in order of authorship):** J. Fornell, E. Pellicer, N. Van Steenberge, S. González, A. Gebert, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Improved plasticity and corrosion behavior in Ti-Zr-Cu-Pd metallic glass with minor additions of Nb: an alloy composition intended for biomedical applications

**JOURNAL/BOOK TITLE:** Materials Science & Engineering A 559 (2013) 159.

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.409, classified as n° 6/75 in the category Metallurgy and Metallurgical Engineering

**141- AUTHORS (in order of authorship):** E. Pellicer, S. González, A. Blanquer, S. Suriñach, M.D. Baró, L. Barrios, E. Ibáñez, C. Nogués, J. Sort

**TITLE:** On the biodegradability, mechanical behavior and cytocompatibility of amorphous Mg<sub>72</sub>Zn<sub>23</sub>Ca<sub>5</sub> and crystalline Mg<sub>70</sub>Zn<sub>23</sub>Ca<sub>5</sub>Pd<sub>2</sub> alloys as temporary implant materials

**JOURNAL/BOOK TITLE:** Journal of Biomedical Materials Research: Part A 101 (2013) 502.

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.841, classified as n° 18/76 in the category Materials Science, Biomaterials.

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**142- AUTHORS (in order of authorship):** O. Ergeneman, K. M. Sivaraman, P. Eberle, G. Chatzipiripiridis, M. Suter, S. Pané, E. Pellicer, J. Sort, B. J. Nelson

**TITLE:** Cobalt-Nickel Microcantilevers for Biosensing

**JOURNAL/BOOK TITLE:** Journal of Intelligent Material Systems and Structures 24 (2013) 2215.

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 2.172, classified as n° 68/251 in the category Materials Science, Engineering.

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**143\*- AUTHORS (in order of authorship):** E. Pellicer, E. Menéndez, J. Fornell, J. Nogués, A. Vantomme, K. Temst, J. Sort

**TITLE:** Mesoporous oxide-diluted magnetic semiconductors prepared by Co implantation in nanocast 3D-ordered In<sub>2</sub>O<sub>3-y</sub> materials

**JOURNAL/BOOK TITLE:** Journal of Physical Chemistry C 117 (2013) 17084.

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR** : 4.835, classified as n° 29/251 in the category Materials Science, Engineering.

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**144- AUTHORS (in order of authorship):** M. A. Zeeshan, S. Pané, S. K. Youn, E. Pellicer, S. Schuerle, J. Sort, S. Fusco, H. Gyu Park and B. J. Nelson  
**TITLE:** Graphite Coating of Iron Nanowires for Nanorobotic Applications: Synthesis, Characterization and Magnetic Wireless Manipulation  
**JOURNAL/BOOK TITLE:** Advanced Functional Materials 23 (2013) 823.  
**KEY:** A  
**DATE OF PUBLICATION:** 2013  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.439, classified as n° 9/136 in the category Applied Physics.  
**REMARK:** Article selected for the Inside Cover of Adv. Funct. Mater. Vol. 23 (issue 7), p. 782.

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**145- AUTHORS (in order of authorship):** K. L. Krycka, J. A. Borchers, G. Salazar-Alvarez, A. López-Ortega, M. Estrader, S. Estradé, E. Winkler, R. D. Zysler, J. Sort, F. Peiró, M. D. Baró, C. C. Kao, J. Nogués  
**TITLE:** Resolving Material-Specific Structures within Fe<sub>3</sub>O<sub>4</sub>/Mn<sub>2</sub>O<sub>3</sub> Core/Shell Nanoparticles Using Anomalous Small-Angle X-ray Scattering (ASAXS)  
**JOURNAL/BOOK TITLE:** ACS Nano 7 (2013) 921-931.  
**KEY:** A  
**DATE OF PUBLICATION:** 2013  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 12.033, classified as n° 7/148 in the category Chemistry, Multidisciplinary.

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**146- AUTHORS (in order of authorship):** K. L. Krycka, J. A. Borchers, M. Laver, G. Salazar-Alvarez, A. López-Ortega, M. Estrader, S. Suriñach, M. D. Baró, J. Sort, J. Nogués  
**TITLE:** Correlating Material-Specific Layers and Magnetic Distributions within Onion-Like Fe<sub>3</sub>O<sub>4</sub>/MnO/Mn<sub>2</sub>O<sub>3</sub> Core/Shell Nanoparticles  
**JOURNAL/BOOK TITLE:** Journal of Applied Physics 113 (2013) 17B531.  
**KEY:** A  
**DATE OF PUBLICATION:** 2013  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.185, classified as n° 37/136 in the category Applied Physics.

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**147\*- AUTHORS (in order of authorship):** S. Pané, B. Özkale, K. M. Sivaraman, C. Ruiz-Camps, S. Suriñach, M. D. Baró, B. J. Nelson, J. Sort, E. Pellicer  
**TITLE:** Tailoring the physical properties of electrodeposited CoNiReP alloys with large Re content by direct, pulse, and reverse pulse current techniques  
**JOURNAL/BOOK TITLE:** Electrochimica Acta 96 (2013) 43. **KEY:** A  
**DATE OF PUBLICATION:** 2013  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.086, classified as n° 4/27 in the category Electrochemistry.

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**148- AUTHORS (in order of authorship):** S. González, E. Pellicer, S. Suriñach, M.D. Baró, J. Sort  
**TITLE:** Biodegradation and mechanical integrity of magnesium and magnesium alloys suitable for implants

**JOURNAL/BOOK TITLE:** Biodegradation / Book 1 (Intech, Ed. R. Chamy), ISBN 980-953-307-968-9 (in press).

**KEY:** BC

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**149- AUTHORS (in order of authorship):** E. Pellicer, M. Cabo, A. López-Ortega, M. Estrader, L. Yedra, S. Estradé, F. Peiró, Z. Saghi, P. Midgley, E. Rossinyol, I. V. Golosovsky, A. Mayoral, J. D. Prades, S. Suriñach, M. D. Baró, J. Sort, J. Nogués

**TITLE:** Controlled 3D-coating of the pores of highly-ordered mesoporous antiferromagnetic Co<sub>3</sub>O<sub>4</sub> replicas with ferrimagnetic Fe<sub>x</sub>Co<sub>3-x</sub>O<sub>4</sub> nanolayers

**JOURNAL/BOOK TITLE:** Nanoscale 5 (2013) 5561

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.739, classified as n° 19/148 in the category Nanoscience and Nanotechnology.

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**150- AUTHORS (in order of authorship):** N. Tsyntaru, H. Cesiulis, E. Pellicer, J.-P. Celis, J. Sort

**TITLE:** Structural, magnetic, and mechanical properties of electrodeposited cobalt-tungsten alloys: intrinsic and extrinsic interdependencies

**JOURNAL/BOOK TITLE:** Electrochimica Acta 104 (2013) 94

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.086, classified as n° 4/27 in the category Electrochemistry.

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**151\*- AUTHORS (in order of authorship):** E. Pellicer, M. Cabo, E. Rossinyol, P. Solsona, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Nanocasting of mesoporous In-TM (TM = Co, Fe, Mn) oxides: towards three-dimensional diluted-oxide magnetic semiconductor architectures

**JOURNAL/BOOK TITLE:** Advanced Functional Materials 23 (2013) 900

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 10.439, classified as n° 9/136 in the category Applied Physics.

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**152\*- AUTHORS (in order of authorship):** S. González, J. Fornell, E. Pellicer, S. Suriñach, M. D. Baró, A. L. Greer, F. J. Belzunce. J. Sort

**TITLE:** Influence of the shot-peening intensity on the structure and near-surface mechanical properties of Ti<sub>40</sub>Zr<sub>10</sub>Cu<sub>38</sub>Pd<sub>12</sub> bulk metallic glass.

**JOURNAL/BOOK TITLE:** Applied Physics Letters 103 (2013) 211907

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.515, classified as n° 20/136 in the category Applied Physics.

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**153\*- AUTHORS (in order of authorship):** L. C. R. Aliaga, J. Fornell, S. Suriñach, M. D. Baró, C. S. Kiminami, C. Bolfarini, W. J. Botta, J. Sort

**TITLE:** Comparative study of nanoindentation on melt-spun ribbon and bulk metallic glass with composition Ni<sub>60</sub>Nb<sub>37</sub>B<sub>3</sub>.

**JOURNAL/BOOK TITLE:** Journal of Materials Research 28 (2013) 2740

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 1.815, classified as n° 72/251 in the category Materials Science: Multidisciplinary.

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**154- AUTHORS (in order of authorship):** E. García-Lecina, I. García-Urrutia, J.A. Díez, J. Fornell, E. Pellicer, J. Sort

**TITLE:** Codeposition of inorganic fullerene-like WS<sub>2</sub> nanoparticles in an electrodeposited nickel matrix under the influence of ultrasonic agitation.

**JOURNAL/BOOK TITLE:** Electrochimica Acta 114 (2013) 859

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.086, classified as n° 4/27 in the category Electrochemistry.

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**155\*- AUTHORS (in order of authorship):** E. Pellicer, E. Rossinyol, M. Rosado, M. Guerrero, R. Domingo-Roca, S. Suriñach, O. Castell, M. D. Baró, M. Roldán, J. Sort

**TITLE:** White-light photoluminescence and photoactivation in cadmium sulfide embedded in mesoporous silicon dioxide templates studied by confocal laser scanning microscopy.

**JOURNAL/BOOK TITLE:** Journal of Colloid & Interface Science 407(2013) 47.

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.552, classified as n° 38/148 in the category Materials Science: Multidisciplinary.

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**156\*- AUTHORS (in order of authorship):** J. Fornell, N.T.C. Oliveira, E. Pellicer, N.V. Steenberge, M.D. Baró, C. Bolfarini, J. Sort.

**TITLE:** Anodic formation of self-organized Ti(Nb,Sn) oxide nanotube arrays with tuneable aspect ratio and size Distribution

**JOURNAL/BOOK TITLE:** Electrochemistry Communications 33 (2013) 84.

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.287, classified as n° 4/27 in the category Electrochemistry.

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**157- AUTHORS (in order of authorship):** E. Tolu, S. Garroni, E. Pellicer, J. Sort, C. Milanese, P. Cosseddu, M. D. Baró, G. Mulas.

**TITLE:** Highly-ordered mesoporous magnesium niobate high-k dielectric ceramics: synthesis, structural/mechanical characterization and thermal stability

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry C 1 (2013) 4948

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.626, classified as n° 20/148 in the category Chemistry, Multidisciplinary.

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**158- AUTHORS (in order of authorship):** S. de Pedro, V. J. Cadarso, X. Muñoz-Berbel, J.A. Plaza, J. Sort, J. Brugger, S. Büttgenbach, A. Llobera

**TITLE:** Magnetically-actuated variable optical attenuators using ferrofluid-doped elastomer implemented by combination of soft lithography and inkjet printing technologies.

**JOURNAL/BOOK TITLE:** Micro Electro Mechanical Systems (MEMS), 2013 IEEE 26th International Conference on MEMS (2013), 548-551

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**159\*- AUTHORS (in order of authorship):** A. Varea, S. Pané, S. Gerstl, M. A. Zeeshan, B. Özkale, B. J. Nelson, S. Suriñach, M. D. Baró, J. Nogués, J. Sort, E. Pellicer

**TITLE:** Ordered arrays of ferromagnetic, compositionally-graded Cu<sub>1-x</sub>Ni<sub>x</sub> alloy nanopillars prepared by template-assisted electrodeposition.

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry C 1 (2013) 7215

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.626, classified as n° 20/148 in the category Chemistry, Multidisciplinary.

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**160\*- AUTHORS (in order of authorship):** M. Guerrero, S. Pané, B. J. Nelson, M. D. Baró, M. Roldán, J. Sort, E. Pellicer

**TITLE:** 3D hierarchically porous Cu-BiOCl nanocomposite films: One-step electrochemical synthesis, structural characterization and nanomechanical and photoluminescent properties.

**JOURNAL/BOOK TITLE:** Nanoscale 5 (2013) 12542

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.739, classified as n° 19/148 in the category Chemistry, Multidisciplinary.

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**161- AUTHORS (in order of authorship):** A. Hynowska, A. Blanquer, E. Pellicer, J. Fornell, S. Suriñach, M. D. Baró, S. González, E. Ibáñez, Ll. Barrios, C. Nogués, J. Sort

**TITLE:** Novel Ti-Zr-Hf-Fe nanostructured alloy for biomedical applications.

**JOURNAL/BOOK TITLE:** Materials 6 (2013) 4930

**KEY:** A

**DATE OF PUBLICATION:** 2013

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 1.879, classified as n° 81/251 in the category Materials Science, Engineering.

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**162\*- AUTHORS (in order of authorship):** J. Fornell, A. Concustell, A.L. Greer, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Effects of shot peening on the nanoindentation response of Cu<sub>47.5</sub>Zr<sub>47.5</sub>Al<sub>5</sub> metallic glass

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 586 (2014) S36-S40.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.999,

classified as n° 4/74 in the category Metallurgy and Metallurgical Engineering.

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**163- AUTHORS (in order of authorship):** S. González, E. Pellicer, S. Suriñach, M. D. Baró, E. García-Lecina, J. Sort

**TITLE:** Effect of thermally-induced surface oxidation on the mechanical properties and corrosion resistance of Zr<sub>60</sub>Cu<sub>25</sub>Al<sub>10</sub>Fe<sub>5</sub> bulk metallic glass

**JOURNAL/BOOK TITLE:** Science of Advanced Materials 6 (2014) 26.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.598,

classified as n° 56/260 in the category Materials Science, Multidisciplinary.

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**164- AUTHORS (in order of authorship):** J. Fornell, E. Pellicer, E. García-Lecina, D. Nieto, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Structural and mechanical modifications induced on Cu<sub>47.5</sub>Zr<sub>47.5</sub>Al<sub>5</sub> metallic glass by surface laser treatments.

**JOURNAL/BOOK TITLE:** Applied Surface Science 290 (2014) 188-193. **KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.711,

classified as n° 2/17 in the category Materials Science, coatings and films .

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**165- AUTHORS (in order of authorship):** S. Abdi, M. Samadi Khoshkhoo, O. Shuleshova, M. Bönisch, M. Calin, L. Schultz, J. Eckert, M. D. Baró, J. Sort, A. Gebert

**TITLE:** Effect of Nb addition on microstructure evolution and nanomechanical properties of a glass-forming Ti-Zr-Si alloy.

**JOURNAL/BOOK TITLE:** Intermetallics 46 (2014) 156-163.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.131,

classified as n° 6/74 in the category Metallurgy and Metallurgical Engineering.

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**166- AUTHORS (in order of authorship):** A. Blanquer, E. Pellicer, A. Hynowska, L. Barrios, E. Ibáñez, M. D. Baró, J. Sort, C. Nogués

**TITLE:** In vitro biocompatibility assessment of Ti<sub>40</sub>Cu<sub>38</sub>Zr<sub>10</sub>Pd<sub>12</sub> bulk metallic glass.

**JOURNAL/BOOK TITLE:** Journal of Materials Science: Materials in Medicine 25 (2014) 163-172.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.587,

classified as n° 25/76 in the category Materials Science, biomaterials.

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**167- AUTHORS (in order of authorship):** M. Lorenzetti, E. Pellicer, J. Sort, M. D. Baró, J. Kovač, S. Novak, S. Kobe

**TITLE:** Improvement to the corrosion resistance of Ti-based implants using hydrothermally synthesized nanostructured anatase coatings.

**JOURNAL/BOOK TITLE:** Materials 7 (2014) 180-194.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.651, classified as n° 55/260 in the category Materials Science, Multidisciplinary

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**168- AUTHORS (in order of authorship):** M. A. Zeeshan, R. Grisch, E. Pellicer, K. M. Sivaraman, K. Peyer, J. Sort, B. Özkale, M. S. Sakar, B. J. Nelson, S. Pané

**TITLE:** Hybrid helical magnetic microrobots obtained by 3D template-assisted electrodeposition.

**JOURNAL/BOOK TITLE:** Small 10 (2014) 1284-1288.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.368, classified as n° 16/260 in the category Materials Science, Multidisciplinary.

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**169- AUTHORS (in order of authorship):** M. Guerrero, J. A. Pérez, J. Ros, V. Branchadell, E. Pellicer, J. Sort, J. Pons

**TITLE:** Design of new N-polyether pyrazole derived ligands. Synthesis, characterization and regioselectivity

**JOURNAL/BOOK TITLE:** Current Organic Synthesis 11 (2014) 149-155.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.117, classified as n° 29/58 in the category Chemistry, Organic.

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**170- AUTHORS (in order of authorship):** E. Menéndez, C. Templier, G. Abrasonis, J. F. Lopez-Barbera, J. Nogués, K. Temst, J. Sort

**TITLE:** A combinatorial study of the mechanical and magnetic properties of a gradually nitrided austenitic stainless steel single crystal

**JOURNAL/BOOK TITLE:** CrystEngComm 16 (2014) 3515–3520.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.034, classified as n° 40/144 in the category Chemistry, Multidisciplinary.

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**171\*- AUTHORS (in order of authorship):** B. Özkale, E. Pellicer, M. A. Zeeshan, J. F. López-Barberá, J. Nogués, J. Sort, B. J. Nelson and S. Pané

**TITLE:** One-pot Electrosynthesis of Multi-layered Magnetic Metallopolymer Nanocomposites

**JOURNAL/BOOK TITLE:** Nanoscale 6 (2014) 4683–4690.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 7.394, classified as n° 12/144 in the category Chemistry, Multidisciplinary.

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**172\*- AUTHORS (in order of authorship):** E. Menéndez, A. Hynowska, J. Fornell, S. Suriñach, J. Montserrat, K. Temst, A. Vantomme, M. D. Baró, E. García-Lecina, E. Pellicer, J. Sort

**TITLE:** Influence of the irradiation temperature on the surface structure and physical/chemical properties of Ar ion-irradiated bulk metallic glasses

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 610 (2014) 118-125.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.999, classified as n° 4/74 in the category Metallurgy and Metallurgical Engineering.

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**173\*- AUTHORS (in order of authorship):** S. González, P. Pérez, E. Rossinyol, S. Suriñach, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Drastic influence of minor Fe or Co additions on the glass forming ability, martensitic transformations and mechanical properties of shape memory Zr-Cu-Al bulk metallic glass composites

**JOURNAL/BOOK TITLE:** Science and Technology of Advanced Materials 15 (2014) 035015.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.513, classified as n° 42/260 in the category Materials Science, Multidisciplinary.

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**174- AUTHORS (in order of authorship):** S. González, J. Sort

**TITLE:** Tuning the corrosion behavior of rapidly solidified and thermally-annealed Fe-Ti-Pd alloys

**JOURNAL/BOOK TITLE:** Advances in Alloys and Compounds 1 (2014) 46-53.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR :**

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**175- AUTHORS (in order of authorship):** S. de Pedro, V. J. Cadarso, X. Muñoz-Berbel, J.A. Plaza, J. Sort, J. Brugger, S. Büttgenbach, A. Llobera

**TITLE:** PDMS-based, magnetically-actuated variable optical attenuators obtained by soft lithography & inkjet

**JOURNAL/BOOK TITLE:** Sensors & Actuators: A 215 (2014) 30-35

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 1.973, classified as n° 42/261 in the category Engineering, Electrical.

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**176- AUTHORS (in order of authorship):** M. Guerrero, A. Altube, E. García-Lecina, E. Rossinyol, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Facile *in Situ* Synthesis of BiOCl Nanoplates Stacked to Highly Porous TiO<sub>2</sub>: A Synergistic Combination for Environmental Remediation

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 6 (2014) 13994–14000

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.723, classified as n° 42/260 in the category Materials Science, Multidisciplinary.

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**177\*- AUTHORS (in order of authorship):** B. Jang, E. Pellicer, M. Guerrero, X. Chen, H. Choi, B. J. Nelson, J. Sort, S. Pané

**TITLE:** Fabrication of Segmented Au/Co/Au Nanowires: Insights in the Quality of Co/Au Junctions

**JOURNAL/BOOK TITLE:** ACS Appl. Mater. Interfaces 6 (2014) 14583–14589.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.723, classified as n° 42/260 in the category Materials Science, Multidisciplinary.

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**178- AUTHORS (in order of authorship):** J. Zhang, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Electrodeposition of magnetic, superhydrophobic, non-stick, two-phase Cu–Ni foam films and their enhanced performance for hydrogen evolution reaction in alkaline water media

**JOURNAL/BOOK TITLE:** Nanoscale 6 (2014) 12490-12499.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 7.394, classified as n° 19/157 in the category Chemistry, Multidisciplinary.

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**179\*- AUTHORS (in order of authorship):** I. Golvano-Escobal, B. Özkale, S. Suriñach, M. D. Baró, T. Dobrovolska, I. Krastev, S. Pané, J. Sort, E. Pellicer

**TITLE:** Self-organized spatio-temporal micropatterning in ferromagnetic Co–In films

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry C 2 (2014) 8259-8269.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.696, classified as n° 33/260 in the category Materials Science, Multidisciplinary.

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**180- AUTHORS (in order of authorship):** N. Tsyntsaru, B. Kavas, J. Sort, M. Urgan, J.-P. Celis

**TITLE:** Mechanical and frictional behaviour of nano-porous anodised aluminium

**JOURNAL/BOOK TITLE:** Materials Chemistry and Physics 148 (2014) 887-895.

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.259, classified as n° 60/157 in the category Chemistry, Multidisciplinary.

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**181\*- AUTHORS (in order of authorship):** E. Pellicer, J. Sort

**TITLE:** Ordered Mesoporous Nanomaterials

**JOURNAL/BOOK TITLE:** Nanomaterials 4 (2014) 902-904

**KEY:** A

**DATE OF PUBLICATION:** 2014

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.076,

classified as n° 83/260 in the category Materials Science, Multidisciplinary.

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**182- AUTHORS (in order of authorship):** A. Hynowska, A. Blanquer, E. Pellicer, J. Fornell, S. Suriñach, M. D. Baró, A. Gebert, M. Calin, J. Eckert, C. Nogués, E. Ibáñez, L. Barrios, J. Sort

**TITLE:** Nanostructured Ti-Zr-Pd-Si-(Nb) bulk metallic composites: novel biocompatible materials with superior mechanical strength and elastic recovery

**JOURNAL/BOOK TITLE:** Journal of Biomedical Materials Research: part B – Applied Biomaterials 103, 1569-1579.

**KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.759,

classified as n° 22/76 in the category Materials Science, Biomaterials.

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**183\*- AUTHORS (in order of authorship):** R. Domingo-Roca, D. Esqué-de los Ojos, M. Guerrero, E. Pellicer, M. D. Baró, S. Suriñach, J. Sort

**TITLE:** Nanomechanical behavior of 3D porous metal-ceramic nanocomposite Bi/Bi<sub>2</sub>O<sub>3</sub> films

**JOURNAL/BOOK TITLE:** Materials Science Engineering A 626 (2015) 150–158.

**KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.567,

classified as n° 56/260 in the category Materials Science, Multidisciplinary.

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**184- AUTHORS (in order of authorship):** G. Chatzipirpiridis, A. Sanoria, O. Ergeneman, J. Sort, J. Puigmartí-Luis, B. J. Nelson, E. Pellicer, S. Pané

**TITLE:** The electrochemical manipulation of apolar solvent drops in aqueous electrolytes by altering the surface polarity of polypyrrole architectures

**JOURNAL/BOOK TITLE:** Electrochemistry Communications 54 (2015) 32-35

**KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT**

**THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.847,

classified as n° 3/28 in the category Electrochemistry.

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**185\*- AUTHORS (in order of authorship):** S. Fusco, H. W. Huang, K. Peyer, C. Peters, M. Haberli, A. Ulbers, A. Spyrogianni, E. Pellicer, J. Sort, S. Pratsinis, B.J. Nelson, M. Selman Sakar, S. Pané

**TITLE:** Shape-switching Microrobots for Medical Applications: The Influence of Shape in Drug Delivery and Locomotion

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 7 (2015) 6803-6811 **KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.723, classified as n° 23/260 in the category Materials Science, Multidisciplinary.

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**186\*- AUTHORS (in order of authorship):** A. Quintana, A. Varea, M. Guerrero, S. Suriñach, M. D. Baró, J. Sort, E. Pellicer

**TITLE:** Structurally and mechanically tunable molybdenum oxide films and patterned nanostructures by electrodeposition

**JOURNAL/BOOK TITLE:** Electrochimica Acta 173 (2015) 705-714 **KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.504, classified as n° 4/28 in the category Electrochemistry.

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**187\*- AUTHORS (in order of authorship):** B. Özkale, N. Shamsudhin, G. Chatzipirpiridis, M. Hoop, F. Gramm, X. Chen, X. Martí, J. Sort, E. Pellicer, S. Pané

**TITLE:** Multisegmented FeCo/Cu Nanowires: Electrosynthesis, Characterization, and Magnetic Control of Biomolecule Desorption

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 13 (2015) 7389-7396

**KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.723, classified as n° 23/260 in the category Materials Science, Multidisciplinary.

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**188- AUTHORS (in order of authorship):** A. M. Lindo, E. Pellicer, M. A. Zeeshan, R. Grisch, F. Qiu, J. Sort, M. S. Sakar, B. J. Nelson, S. Pané

**TITLE:** The biocompatibility and anti-biofouling properties of magnetic core-multishell Fe@C NWs-AAO nanocomposites

**JOURNAL/BOOK TITLE:** Phys. Chem. Chem. Phys. 17 (2015) 13274-13279 **KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.493, classified as n° 32/139 in the category Chemistry, Physical.

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**189- AUTHORS (in order of authorship):** A. M. López Marzo, M. Guerrero, T. Calvet, M. Font-Bardia, E. Pellicer, M. D. Baró, J. Pons, J. Sort

**TITLE:** New binuclear copper(II) coordination polymer based on mixed pyrazolic and oxalate ligands: structural characterization and mechanical properties

**JOURNAL/BOOK TITLE:** RSC Advances 5 (2015) 32369-32375 **KEY:** A

**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.84, classified as n° 33/157 in the category Chemical, Engineering.

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**190- AUTHORS (in order of authorship):** B. B. Medeiros, M. M. Medeiros, J. Fornell, J. Sort, M. D. Baró, A.M. Jorge Junior

**TITLE:** Nanoindentation response of Cu-Ti based metallic glasses: comparison between as-cast, relaxed and devitrified states

**JOURNAL/BOOK TITLE:** Journal of Non-Crystalline Solids, 425, 103-109 **KEY:** A  
**DATE OF PUBLICATION:** 2015  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 1.825, classified as n° 21/87 in the category Ceramics, Composites.

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**191- AUTHORS (in order of authorship):** J. A. De Toro, D. P. Marques, P. Muñiz, V. Skumryev, J. Sort, D. Givord, J. Nogués  
**TITLE:** High temperature magnetic stabilization of cobalt nanoparticles by an antiferromagnetic proximity effect  
**JOURNAL/BOOK TITLE:** Physical Review Letters, 115, 057201 **KEY:** A  
**DATE OF PUBLICATION:** 2015  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.645, classified as n° 5/80 in the category Physics, Multidisciplinary.

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**192- AUTHORS (in order of authorship):** D. A. Gilbert, L. Ye, A. Varea, S. Agramunt-Puig, N. del Valle, C. Navau, J. F. López-Barbera, K. S. Buchanan, A. Hoffmann, A. Sánchez, J. Sort, K. Liu, J. Nogués  
**TITLE:** New Reversal Mode in Exchange Coupled Antiferromagnetic/Ferromagnetic Disks: Distorted Viscous Vortex  
**JOURNAL/BOOK TITLE:** Nanoscale, 7, 9878-9885 **KEY:** A  
**DATE OF PUBLICATION:** 2015  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.394, classified as n° 19/157 in the category Nanoscience and Nanotechnology.

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**193- AUTHORS (in order of authorship):** J. Pokki, J. Parmar, O. Ergeneman, H. Torun, M. Guerrero, E. Pellicer, J. Sort, S. Pané, B.J. Nelson  
**TITLE:** Mobility-enhancing coatings for vitreoretinal surgical devices: hydrophilic and enzymatic coatings investigated by microrheology  
**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 7, 22018–22028 **KEY:** A  
**DATE OF PUBLICATION:** 2015  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.723, classified as n° 23/260 in the category Materials Science, Multidisciplinary.

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**194- AUTHORS (in order of authorship):** F. Mushtaq, M. Guerrero, S. Saka, A.M. Lindo, M. Hoop, J. Sort, X. Chen, B. J. Nelson, E. Pellicer, S. Pané  
**TITLE:** Magnetically Driven Bi<sub>2</sub>O<sub>3</sub>/BiOCl-Based Hybrid Microrobots for Photocatalytic Water Remediation  
**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry A, 3, 23670–2367 **KEY:** A  
**DATE OF PUBLICATION:** 2015  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.443, classified as n° 18/139 in the category Chemistry, Physical.

---

**195- AUTHORS (in order of authorship):** K. C. Chan, J. Sort  
**TITLE:** Metallic Glasses  
**JOURNAL/BOOK TITLE:** Metals, 5, 2397–2400 **KEY:** A  
**DATE OF PUBLICATION:** 2015

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 1.574, classified as n° 31/74 in the category Metallurgy and Metallurgical Engineering.

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**196- AUTHORS (in order of authorship):** S. Abdi, S. Oswald, P. F. Gostin, A. Helth, J. Sort, M. D. Baró, M. Calin, L. Schultz, J. Eckert, A. Gebert

**TITLE:** Designing new biocompatible glass-forming  $Ti_{75-x}Zr_{10}Nb_xSi_{15}$  ( $x= 0, 15$ ) alloys: corrosion, passivity and apatite formation

**JOURNAL/BOOK TITLE:** Journal of Biomedical Materials Research: part B – Applied Biomaterials 104, 27-38.

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.373

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**197- AUTHORS (in order of authorship):** D. Esqué de los Ojos, J. Sort

**TITLE:** Nanoindentation modelling: From finite element to atomistic simulations

**JOURNAL/BOOK TITLE:** A. Tiwari (Editor), Applied Nanoindentation in Advanced Materials (ISBN: 978-1-119-08449-5), John Wiley & Sons, Inc. **KEY:** CB

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO

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**198- AUTHORS (in order of authorship):** D. Esqué-de los Ojos, R. Ghisleni, A. Battisti, G. Mohanty, J. Michler, J. Sort, A. J. Brunner

**TITLE:** Understanding the mechanical behaviour of fibre/matrix interfaces during push-in tests by means of finite element simulations and a cohesive zone model

**JOURNAL/BOOK TITLE:** Computational Materials Science 117, 330–337 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.530

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**199- AUTHORS (in order of authorship):** N. Tsyntsaru, S. Silkin, H. Cesiulis, M. Guerrero, E. Pellicer, J. Sort

**TITLE:** Toward uniform electrodeposition of magnetic Co-W mesowires arrays: direct versus pulse current deposition

**JOURNAL/BOOK TITLE:** Electrochimica Acta, 188, 589–601 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.116

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**200- AUTHORS (in order of authorship):** M. I. Irshad, N. M. Mohamed, M. Z. Abdullah, M. S. M. Saheed, A. Mumtaz, M. Yasar, A. Yar, M. A. Zeeshan, J. Sort

**TITLE:** Influence of the Electrodeposition Potential on the Crystallographic Structure and Effective Magnetic Easy Axis of Cobalt Nanowires

**JOURNAL/BOOK TITLE:** RSC Advances 16, 14266–14272 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.936

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**201- AUTHORS (in order of authorship):** I. Golvano-Escobal, S. Suriñach, M. D. Baró, S. Pané, J. Sort, E. Pellicer

**TITLE:** Electrodeposition of sizeable and compositionally tunable rhodium-iron nanoparticles and their activity toward hydrogen evolution reaction

**JOURNAL/BOOK TITLE:** Electrochimica Acta 194, 263-275

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.116

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**202\*- AUTHORS (in order of authorship):** S. Agramunt-Puig, N. Del-Valle, E. Pellicer, J. Zhang, J. Nogués, C. Navau, A. Sanchez, J. Sort

**TITLE:** Modeling the collective magnetic behavior of highly-packed arrays of multi-segmented nanowires

**JOURNAL/BOOK TITLE:** New Journal of Physics 18, 013026

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.579

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**203\*- AUTHORS (in order of authorship):** R. Pol, M. Guerrero, E. García-Lecina, A. Altube, E. Rossinyol, S. Garroni, M. D. Baró, J. Pons, J. Sort, E. Pellicer

**TITLE:** Ni-, Pt- and (Ni/Pt)-doped TiO<sub>2</sub> nanophotocatalysts: A smart approach for sustainable degradation of Rhodamine B dye

**JOURNAL/BOOK TITLE:** Applied Catalysis B: Environmental, 181, 270–278

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 11.698

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**204\*- AUTHORS (in order of authorship):** M. A. Zeeshan, D. Esqué-de los Ojos, P. Castro-Hartmann, M. Guerrero, J. Nogués, S. Suriñach, M. D. Baró, B. J. Nelson, S. Pané, E. Pellicer, J. Sort

**TITLE:** Electrochemically Synthesized Amorphous and Crystalline Nanowires: Dissimilar Nano-mechanical Behavior in Comparison to Homologous Flat Films (also Front Cover of the issue)

**JOURNAL/BOOK TITLE:** Nanoscale, 8, 1344-1351

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 7.233

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**205\*- AUTHORS (in order of authorship):** E. Pellicer, J. Sort

**TITLE:** Frontiers in mesoporous nanomaterials

**JOURNAL/BOOK TITLE:** Nanomaterials, 6, 15

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.504

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**206\*- AUTHORS (in order of authorship):** J. Zhang, S. Agramunt-Puig, N. Del-Valle, C. Navau, M. D. Baró, S. Estradé, F. Peiró, S. Pané, B. J. Nelson, A. Sanchez, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Tailoring Staircase-like Hysteresis Loops in Electrodeposited Tri-segmented Magnetic Nanowires: a Strategy towards Minimization of Interwire Interactions

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 8, 4109–4117

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.097

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**207\*- AUTHORS (in order of authorship):** H. Zhang, Y. Feng, D. Nieto, E. García-Lecina, C. Mcdaniel, J. Díaz-Marcos, M. T. Flores-Arias, G. M. O'connord, M. D. Baró, E. Pellicer, J. Sort  
**TITLE:** Sub-micron Magnetic Patterns and Local Variations of Adhesion Force Induced in Non-Ferromagnetic Amorphous Steel by Femtosecond Pulsed Laser Irradiation  
**JOURNAL/BOOK TITLE:** Applied Surface Science 371, 399-406 **KEY: A**  
**DATE OF PUBLICATION:** 2016  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.439

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**208- AUTHORS (in order of authorship):** J. Parmar, D. Vilela, E. Pellicer, D. Esqué-de los Ojos, J. Sort, S. Sánchez  
**TITLE:** Reusable and long-lasting active micro-cleaners for heterogeneous water remediation  
**JOURNAL/BOOK TITLE:** Advanced Functional Materials 26, 4152-4161 **KEY: A**  
**DATE OF PUBLICATION:** 2016  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 13.325

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**209- AUTHORS (in order of authorship):** M. Guerrero, J. Zhang, A. Altube, E. García-Lecina, M. Roldan, M. D. Baró, E. Pellicer, J. Sort  
**TITLE:** Room-temperature synthesis of three-dimensional porous ZnO@CuNi hybrid magnetic magnetic layers with photoluminescent and photocatalytic properties  
**JOURNAL/BOOK TITLE:** Science and Technology of Advanced Materials 17, 177-187  
**KEY: A**  
**DATE OF PUBLICATION:** 2016  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.787

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**210- AUTHORS (in order of authorship):** J. Fan, J. Zhang, P. Solsona, S. Suriñach, M. D. Baró, J. Sort, E. Pellicer  
**TITLE:** Nanocasting synthesis of mesoporous SnO<sub>2</sub> with a tunable ferromagnetic response through Ni loading  
**JOURNAL/BOOK TITLE:** RSC Advances 6, 104799-104807 **KEY: A**  
**DATE OF PUBLICATION:** 2016  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.936

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**211- AUTHORS (in order of authorship):** N. Shamsudhin, Y. Tao, J. Sort, B. Jang, C. L. Degen, B. J. Nelson, S. Pané  
**TITLE:** Magnetometry of Individual Polycrystalline Ferromagnetic Nanowires  
**JOURNAL/BOOK TITLE:** Small 12, 6363-6369 **KEY: A**  
**DATE OF PUBLICATION:** 2016  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.598

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**212- AUTHORS (in order of authorship):** S. de Pedro, X. Muñoz-Berbel, R. Rodríguez-Rodríguez, J. Sort, J. A. Plaza, J. Brugger, A. Llobera, V. J. Cadarso  
**TITLE:** Characterization of Ferrofluid-Based Stimuli-Responsive Elastomers  
**JOURNAL/BOOK TITLE:** Frontiers in Mechanical Engineering 2, 12 **KEY: A**  
**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**213- AUTHORS (in order of authorship):** D. Esqué-de los Ojos, J. Zhang, J. Fornell, E. Pellicer, J. Sort

**TITLE:** Nanomechanical behaviour of open-cell nanoporous metals: Homogeneous versus thickness-dependent porosity

**JOURNAL/BOOK TITLE:** Mechanics of Materials 100, 167-174 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.697

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**214- AUTHORS (in order of authorship):** S. Sevim, S. Ozer, L. Feng, J. Wurzel, A. Fakhraee, N. Shamsudhin, B. Jang, C. Alcantara, O. Ergeneman, E. Pellicer, J. Sort, T. Lühmann, S. Pané, B. J. Nelson, H. Torun

**TITLE:** Dually actuated atomic force microscope with miniaturized magnetic bead-actuators for single-molecule force measurements

**JOURNAL/BOOK TITLE:** Nanoscale Horizons 1, 488-495 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 9.391

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**215\*- AUTHORS (in order of authorship):** Y. P. Feng, A. Blanquer, J. Fornell, H. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, E. García-Lecina, X. Wei, R. Li, L. Barrios, E. Pellicer, C. Nogués, J. Sort

**TITLE:** Novel Fe–Mn–Si–Pd alloys: insights into mechanical, magnetic, corrosion resistance and biocompatibility performances

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry B 4, 6402-6412 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.776

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**216- AUTHORS (in order of authorship):** G. Salazar-Alvarez, J. Geshev, S. Agramunt-Puig, C. Navau, A. Sanchez, J. Sort, J. Nogués

**TITLE:** Tunable high-field magnetization in strongly exchange-coupled freestanding Co/CoO core/shell coaxial nanowires

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 8, 22477-22483 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.097

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**217\*- AUTHORS (in order of authorship):** J. Zhang, M. Coll, T. Puig, E. Pellicer, J. Sort

**TITLE:** Conformal oxide nanocoatings on electrodeposited 3D porous Ni films by atomic layer deposition (also Back Cover of the Issue)

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry C 4, 8655-8662 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.976

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**218\*- AUTHORS (in order of authorship):** J. Zhang, S. Pané, J. Sort, E. Pellicer

**TITLE:** Toward Robust Segmented Nanowires: Understanding the Impact of Crystallographic Texture on the Quality of Segment Interfaces in Magnetic Metallic Nanowires

**JOURNAL/BOOK TITLE:** Advanced Materials Interfaces 3 (2016) 1600336 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.097

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**219- AUTHORS (in order of authorship):** C. E. Moyano-Camero, J. M. Trigo-Rodríguez, E. Pellicer, J. Llorca, M. Martínez-Jiménez, J. Sort

**TITLE:** Uv-Nir Spectra and Nanoindentation of Chelyabinsk to Infer the Mechanical Properties of Hazardous Asteroids

**JOURNAL/BOOK TITLE:** Meteoritics & Planetary Science 51, A474-A474 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.949

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**220\*- AUTHORS (in order of authorship):** I. Golvano-Escobal, J. C. Gonzalez-Rosillo, N. Domingo, X. Illa, J. F. López-Barberá, J. Fornell, P. Solsona, L. Aballe, M. Foerster, S. Suriñach, M. D. Baró, T. Puig, S. Pané, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Spontaneous formation of spiral-like patterns with distinct periodic physical properties by confined electrodeposition of Co-In disks

**JOURNAL/BOOK TITLE:** Scientific Reports 6 (2016) 30398 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.122

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**221- AUTHORS (in order of authorship):** A. Calleja, J. Sort, S. Ricart, X. Granados, X. Palmer, V. R. Vlad, T. Puig, X. Obradors

**TITLE:** Composite films combining electrospun fiber network and epitaxial oxide by chemical solution deposition

**JOURNAL/BOOK TITLE:** Journal of Sol-Gel Science and Technology 80, 277-284 (including Front Cover of the Issue) **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 1.745

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**222- AUTHORS (in order of authorship):** B. Özkale, F. Mushtaq, J. Fornell, G. Chatzipirpiridis, L. H. J. Martin, J. Sort, C. M. Müller, E. Pellicer, B. J. Nelson, S. Pané

**TITLE:** Single step electrosynthesis of NiMnGa alloys

**JOURNAL/BOOK TITLE:** Electrochimica Acta 204 (2016) 199-205 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.116

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**223- AUTHORS (in order of authorship):** L. Yedra, A. Eljarrat, R. Arenal, L. López-Conesa, E. Pellicer, A Lopez-Ortega, M. Estrader, J. Sort, M. D. Baró, S. Estradé, F. Peiró

**TITLE:** Electron Energy-Loss Spectroscopic Tomography of  $\text{Fe}_x\text{Co}_{(3-x)}\text{O}_4$  Impregnated  $\text{Co}_3\text{O}_4$  Mesoporous Particles: Unraveling the Chemical Information in Three Dimensions

**JOURNAL/BOOK TITLE:** Analyst 141, 4968-4972 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.864

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**224- AUTHORS (in order of authorship):** A. Blanquer, A. Hynowska, C. Nogués, E. Ibáñez, J. Sort, M. D. Baró, B. Özkale, S. Pané, E. Pellicer, L. Barrios

**TITLE:** Effect of Surface Modifications of Ti<sub>40</sub>Zr<sub>10</sub>Cu<sub>38</sub>Pd<sub>12</sub> Bulk Metallic Glass and Ti-6Al-4V Alloy on Human Osteoblasts In Vitro Biocompatibility

**JOURNAL/BOOK TITLE:** PloS one 11, e0156644

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.766

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**225- AUTHORS (in order of authorship):** A. Serrà, X. Alcobe, J. Sort, J. Nogués, E. Valles

**TITLE:** Highly efficient electrochemical and chemical hydrogenation of 4-nitrophenol using recyclable narrow mesoporous magnetic CoPt nanowires

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry A 4, 15676-15687 **KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.931

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**226\*- AUTHORS (in order of authorship):** D. Esqué-de los Ojos, E. Pellicer, J. Sort

**TITLE:** The Influence of Pore Size on the Indentation Behavior of Metallic Nanoporous Materials: A Molecular Dynamics Study

**JOURNAL/BOOK TITLE:** Materials 9 (2016) 355

**KEY:** A

**DATE OF PUBLICATION:** 2016

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.467

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**227- AUTHORS (in order of authorship):** J. Pokki, O. Ergeneman, G. Chatzipirpiridis, T. Lühmann, J. Sort, E. Pellicer, S. A. Pot, B. M. Spiess, S. Pané, B. J. Nelson

**TITLE:** Protective coatings for intraocular wirelessly controlled microrobots for implantation: corrosion, cell culture, and in vivo animal tests

**JOURNAL/BOOK TITLE:** Journal of Biomedical Materials Research Part B 105, 836-845.

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.373

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**228\*- AUTHORS (in order of authorship):** I. Golvano-Escobal, J. de Dios Sirvent, M. Ferran-Marqués, S. Suriñach, M.D. Baró, S. Pané, J. Sort, E. Pellicer

**TITLE:** Cross-sectioning spatio-temporal Co-In electrodeposits: disclosing a magnetically-patterned nanolaminated structure

**JOURNAL/BOOK TITLE:** Materials and Design, 114, 202-207

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.525

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**229- AUTHORS (in order of authorship):** V.M. Villapún, H. Zhang, C. Howden, L. Cheung Chow, F. Esat, P. Pérez, J. Sort, S. Bull, J. Stach, S. González

**TITLE:** Antimicrobial and wear performance of Cu-Zr-Al metallic glass composites

**JOURNAL/BOOK TITLE:** Materials and Design, 115, 93–102 **KEY:** A  
**DATE OF PUBLICATION:** 2017  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.525

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**230- AUTHORS (in order of authorship):** D. Bilican, J. Fornell, J. Sort, E. Pellicer E  
**TITLE:** Electrochemical synthesis of bismuth particles: tuning particle shape through substrate type within a narrow potential window  
**JOURNAL/BOOK TITLE:** Materials 10, 43 **KEY:** A  
**DATE OF PUBLICATION:** 2017  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.467

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**231- AUTHORS (in order of authorship):** N. Imaz, J.A. Díez, E. Pellicer, J. Sort, H. Grande, E. García-Lecina  
**TITLE:** Thermal treatment effect on the mechanical, tribological and corrosion properties of Ni-W alloy obtained by direct and pulse plating electrodeposition  
**JOURNAL/BOOK TITLE:** T. I. Met. Finish. 95, 31-38 **KEY:** A  
**DATE OF PUBLICATION:** 2017  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** 0.59

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**232- AUTHORS (in order of authorship):** C.E. Moyano-Camero, E. Pellicer, J.M. Trigo-Rodríguez, I.P. Williams, J. Blum, P. Michel, M. Küppers, M. Martínez-Jiménez, I. Lloro, J. Sort  
**TITLE:** Nanoindenting the Chelyabinsk meteorite to learn about impact deflection effects in asteroids  
**JOURNAL/BOOK TITLE:** The Astrophysical Journal 835, 157 **KEY:** A  
**DATE OF PUBLICATION:** 2017  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.551

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**233- AUTHORS (in order of authorship):** C.E. Moyano-Camero, J.M. Trigo-Rodríguez, E. Pellicer, M. Martínez-Jiménez, J. Llorca, N. Mestres, J. Sort  
**TITLE:** Chelyabinsk meteorite as a proxy for studying the properties of Potentially Hazardous Asteroids and impact deflection strategies, in "Assessment and Mitigation of Asteroid Impact Hazards  
**JOURNAL/BOOK TITLE:** Astrophysics and Space Science Proceedings (Eds. Trigo-Rodríguez JM, Gritsevich M, Palme H), Springer International Publishing AG. (ISBN: 3319461788), vol. 47, pp. 219-241. **KEY:** BC  
**DATE OF PUBLICATION:** 2017  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X

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**234- AUTHORS (in order of authorship):** M. Farhadi-Khouzani, C. Schütz, G.M. Durak, J. Fornell, J. Sort, G. Salazar-Alvarez, L. Bergström, D. Gebauer D  
**TITLE:** A CaCO<sub>3</sub>/nanocellulose-based bioinspired nacre-like material  
**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry A 5, 16128-16133 **KEY:** A  
**DATE OF PUBLICATION:** 2017  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.931

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**235- AUTHORS (in order of authorship):** M. Y. Tsang, S. Rodríguez-Hermida, K. C. Stylianou, F. Tan, D. Negi, F. Teixidor, C. Viñas, D. Choquesillo-Lazarte, C. Verdugo-Escamilla, M. Guerrero, J. Sort, J. Juanhuix, I. Imaz, D. MasPOCH, J. Giner Planas

**TITLE:** Carborane bis-pyridylalcohols as linkers for Coordination Polymers: Synthesis, Crystal Structures and Guest-Framework dependent Mechanical Properties

**JOURNAL/BOOK TITLE:** Crystal Growth & Design, 17, 846–857

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.972

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**236\*- AUTHORS (in order of authorship):** E. Dislaki, J. Sort, E. Pellicer

**TITLE:** Parametric aqueous electrodeposition study and characterization of Fe–Cu films

**JOURNAL/BOOK TITLE:** Electrochimica Acta 231, 739–748

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.116

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**237\*- AUTHORS (in order of authorship):** U. Klement, E. Pellicer, J. Sort

**TITLE:** Mid-term meeting of SELECTA: an European Training Network on smart electrodeposited alloys for environmentally sustainable applications

**JOURNAL/BOOK TITLE:** T. I. Met. Finish. 95, 124-125.

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 0.59

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**238\*- AUTHORS (in order of authorship):** H. Zhang, Y.P. Feng, Y. Cheng, M.D. Baró, A. Altube, E. García-Lecina, F. Alcaide, E. Pellicer, T. Zhang, J. Sort

**TITLE:** Nanoporous Fe-based alloy prepared by selective dissolution: an effective Fenton catalyst for water remediation

**JOURNAL/BOOK TITLE:** ACS Omega, 2, 653–662

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**239- AUTHORS (in order of authorship):** E.I. Chávez, M.D. Baró, E. Rossinyol, U. Morales-Ortiz, J. Sort, E. Brillas, E. Pellicer

**TITLE:** Comparative electrochemical oxidation of methyl orange azo dye using Ti/Ir-Pb, Ti/Ir-Sn, Ti/Ru-Pb, Ti/Pt-Pd and Ti/RuO<sub>2</sub>

**JOURNAL/BOOK TITLE:** Electrochimica Acta, 244, 199-208

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.516

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**240- AUTHORS (in order of authorship):** A. Quintana, A. Altube, E. García-Lecina, S. Suriñach, M.D. Baró, J. Sort, E. Pellicer, M. Guerrero

**TITLE:** A facile co-precipitation synthesis of heterostructured ZrO<sub>2</sub>|ZnO nanoparticles as efficient photocatalysts for wastewater treatment

**JOURNAL/BOOK TITLE:** Journal of Materials Science 52, 13779-13789

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.993

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**241\*- AUTHORS (in order of authorship):** D. Bilican, E. Menéndez, J. Zhang, P. Solsona, J. Fornell, E. Pellicer, J. Sort

**TITLE:** Ferromagnetic-like behaviour in bismuth ferrite films prepared by electrodeposition and subsequent heat treatment

**JOURNAL/BOOK TITLE:** RSC Advances 7, 32133-32138

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.936

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**242- AUTHORS (in order of authorship):** S. Sevim, S. Özer, G. Jones, J. Wurzel, L. Feng, A. Fakhraee, N. Shamsudhin, O. Ergeneman, E. Pellicer, J. Sort, S. Pané, B.J. Nelson, H. Torun, T. Lühmann

**TITLE:** Nanomechanics on FGF-2 and heparin reveal slip bond characteristics with pH dependency

**JOURNAL/BOOK TITLE:** ACS Biomaterials Science & Engineering 3, 1000-1007

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.432

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**243\*- AUTHORS (in order of authorship):** J. Fan, E. Menéndez, M. Guerrero, A. Quintana, E. Weschke, E. Pellicer, J. Sort

**TITLE:** Unraveling the origin of magnetism in mesoporous Cu-doped SnO<sub>2</sub> magnetic semiconductor

**JOURNAL/BOOK TITLE:** Nanomaterials 7, 348

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.504

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**244\*- AUTHORS (in order of authorship):** A. Quintana, A. Gómez, M.D. Baró, S. Suriñach, E. Pellicer, J. Sort

**TITLE:** Self-templating Faceted and Spongy Single-Crystal ZnO Nanorods: Resistive Switching and Enhanced Piezoresponse

**JOURNAL/BOOK TITLE:** Materials & Design 133, 54-61

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.525

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**245- AUTHORS (in order of authorship):** A. Serrà, S. Grau, C. Gimbert-Suriñach, J. Sort, J. Nogués, E. Vallés

**TITLE:** Magnetically-actuated mesoporous nanowires for enhanced heterogeneous catalysis

**JOURNAL/BOOK TITLE:** Applied Catalysis B: Environmental, 217, 81-91

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 11.698

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**246\*- AUTHORS (in order of authorship):** K.C. Chan, J. Sort

**TITLE:** Metallic Glasses

**JOURNAL/BOOK TITLE:** Special Issue Book Metals - MDPI (ISBN 978-3-03842-507-6)

**KEY:** B

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X

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**247\*- AUTHORS (in order of authorship):** J. Fornell, J. Soriano, M. Guerrero, J. de Dios Sirvent, M. Ferran-Marqués, L. Barrios, M.D. Baró, S. Suriñach, C. Nogués, J. Sort, E. Pellicer

**TITLE:** Biodegradable FeMnSi Sputter-Coated Macroporous Polypropylene Membranes for the Sustained Release of Drugs

**JOURNAL/BOOK TITLE:** Nanomaterials 7, 155

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.504

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**248\*- AUTHORS (in order of authorship):** J. Fan, M. Guerrero, A. Carretero-Genevri, M.D. Baró, S. Suriñach, E. Pellicer, J. Sort

**TITLE:** Evaporation-induced self-assembly synthesis of Ni-doped mesoporous SnO<sub>2</sub> thin films with tunable room temperature magnetic properties

**JOURNAL/BOOK TITLE:** Journal of Materials Chemistry C 5, 5517-5527

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.976

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**249\*- AUTHORS (in order of authorship):** E. Pellicer, D. Nikolic, J. Sort, M.D. Baró, F. Zivic, N. Grujovic, R. Grujic, S. Pelemis

**TITLE:** Advances in Application of Industrial Biomaterials, ISBN 978-3-319-62766-3

**JOURNAL/BOOK TITLE:** Springer - Nature

**KEY:** B

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X

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**250- AUTHORS (in order of authorship):** I. Fina, A. Quintana, J. Padilla-Pantoja, X. Marti, F. Macia, F. Sanchez, M. Foerster, L. Aballe, J. Fontcuberta, J. Sort

**TITLE:** Electric-Field-Adjustable Time-Dependent Magnetoelectric Response in Martensitic FeRh Alloy

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 9, 15577-15582

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.097

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**251\*- AUTHORS (in order of authorship):** J. Sort

**TITLE:** Nanocrystalline and nanostructured metals and alloys (Editorial)

**JOURNAL/BOOK TITLE:** Research and Reports on Metals 1, 1

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** --

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**252\*- AUTHORS (in order of authorship):** D. Esqué de los Ojos, J. Sort

**TITLE:** 'Nanoindentation modelling: From finite element to atomistic simulations' (Chapter 16, pp. 369-392)

**JOURNAL/BOOK TITLE:** Applied Nanoindentation in Advanced Materials (ISBN: 978-1-119-08449-5), John Wiley & Sons, Inc. **KEY:** BC

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO

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**253- AUTHORS (in order of authorship):** J. Fornell, Y.P. Feng, E. Pellicer, S. Suriñach, M.D. Baró, [J. Sort](#)

**TITLE:** Mechanical behaviour of brushite and hydroxyapatite coatings electrodeposited on newly developed FeMnSiPd alloy

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 729, 231-239 **KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.779

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**254- AUTHORS (in order of authorship):** B. Jang, A. Hong, H.E. Kang, C. Alcantara, S. Charreyron, F. Mushtaq, E. Pellicer, R. Buchel, [J. Sort](#), S.S. Lee, B.J. Nelson, S. Pane

**TITLE:** Multiwavelength Light-Responsive Au/B-TiO<sub>2</sub> Janus Micromotors

**JOURNAL/BOOK TITLE:** ACS Nano 11, 6146-6154. **KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 13.709

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**255\*- AUTHORS (in order of authorship):** A. Quintana, J. Zhang, E. I. Chávez, E. Menéndez, R. Cuadrado, R. Robles, M.D. Baró, M. Guerrero, S. Pané, B.J. Nelson, C.M. Müller, P. Ordejón, J. Nogués, E. Pellicer, [J. Sort](#)

**TITLE:** Voltage-induced coercivity reduction in nanoporous alloy films: a boost towards energy-efficient magnetic actuation

**JOURNAL/BOOK TITLE:** Advanced Functional Materials, 27, 1701904

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 13.325

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**256\*- AUTHORS (in order of authorship):** Y.P. Feng, N. Gaztelumendi, J. Fornell, H.Y. Zhang, P. Solsona, M.D. Baró, S. Suriñach, E. Ibáñez, L. Barrios, E. Pellicer, C. Nogués, [J. Sort](#)

**TITLE:** Mechanical properties, corrosion performance and cell viability studies on newly developed porous Fe-Mn-Si-Pd alloys

**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds, 724, 1046 – 1056

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.779

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**257- AUTHORS (in order of authorship):** J.D. Clarkson, I. Fina, Z.Q. Liu, Y. Lee, J. Kim, C. Frontera, K. Cordero, S. Wisotzki, F. Sanchez, [J. Sort](#), S.L. Hsu, C. Ko, L. Aballe, M. Foerster, J. Wu, H.M. Christen, J.T. Heron, D.G. Schlom, S. Salahuddin, N. Kioussis, J. Fontcuberta, X. Marti, R. Ramesh

**TITLE:** Hidden Magnetic States Emergent Under Electric Field, In A Room Temperature Composite Magnetoelectric Multiferroic

**JOURNAL/BOOK TITLE:** Scientific Reports 7, 15460 **KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.122

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**258- AUTHORS (in order of authorship):** K. Cordero-Edwards, N. Domingo, A. Abdollahi, J. Sort, G. Catalan

**TITLE:** Ferroelectrics as smart mechanical materials

**JOURNAL/BOOK TITLE:** Advanced Materials 29, 1702210

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 21.950

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**259- AUTHORS (in order of authorship):** M. Vilardell, J. Fornell, J. Sort, R. Vlad, J.C. Fernández, J. Puig, A. Usoskin, A. Palau, T. Puig, X. Obradors, A. Calleja

**TITLE:** Inkjet-printed chemical solution Y2O3 layers for planarization of technical substrates

**JOURNAL/BOOK TITLE:** Coatings 7, 227

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** 2.350

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**260\*- AUTHORS (in order of authorship):** E. I. Chávez E, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Micelle-assisted electrodeposition of highly mesoporous Fe-Pt nodular films with soft magnetic and electrocatalytic properties

**JOURNAL/BOOK TITLE:** Nanoscale 9 (2017) 18081-18093.

**KEY:** A

**DATE OF PUBLICATION:** 2017

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.233

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**261- AUTHORS (in order of authorship):** A. Blanquer, J. Musilkova, L. Barrios, E. Ibáñez, M. Vandrovцова, E. Pellicer, J. Sort, L. Bacakova, C. Nogués

**TITLE:** Cytocompatibility assessment of Ti-Zr-Pd-Si-(Nb) alloys with low Young's modulus, increased hardness and enhanced osteoblast differentiation for biomedical applications

**JOURNAL/BOOK TITLE:** Journal of Biomedical Materials Research: Part B - Applied Biomaterials 106, 834-842

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.368

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**262- AUTHORS (in order of authorship):** A. Nicolenco, N. Tsyntsaru, J. Fornell, E. Pellicer, J. Reklaitis, D. Baltrunas, H. Cesiulis, J. Sort

**TITLE:** Mapping of magnetic and mechanical properties of Fe-W alloys electrodeposited from Fe(III)-based glycolate-citrate bath

**JOURNAL/BOOK TITLE:** Materials & Design 139, 429-438

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.91

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**263\*- AUTHORS (in order of authorship):** E. Isarain-Chávez, M. D. Baró, C. Alcantara, S. Pané, J. Sort, E. Pellicer

**TITLE:** Micelle-assisted electrodeposition of mesoporous Fe-Pt smooth thin films onto various substrates and their electrocatalytic activity towards hydrogen evolution reaction

**JOURNAL/BOOK TITLE:** ChemSusChem 11, 367-375 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 9.1

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**264\*- AUTHORS (in order of authorship):** D. Brabazon, E. Pellicer, F. Zivic, J. Sort, M. D. Baró, N. Grujovic, K. L. Choy

**TITLE:** Commercialization of Nanotechnologies - A Case Study Approach (Editors)

**JOURNAL/BOOK TITLE:** Commercialization of Nanotechnologies - A Case Study Approach, Springer International Publishing (978-3-319-56978-9). **KEY:** B

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**265\*- AUTHORS (in order of authorship):** J. Zhang, E. Pellicer, J. Sort

**TITLE:** Towards voltage-driven nano-spintronics: a review

**JOURNAL/BOOK TITLE:** Commercialization of Nanotechnologies - A Case Study Approach, Springer International Publishing (978-3-319-56978-9), p. 99-115 **KEY:** BC

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**266- AUTHORS (in order of authorship):** F. Zivic, N. Grujovic, E. Pellicer, J. Sort, S. Mitrovic, G. Adamovic, M. Vulovic

**TITLE:** Biodegradable metals as biomaterials for clinical practice: iron-based materials

**JOURNAL/BOOK TITLE:** Biomaterials in clinical practice – advances in clinical research and medical devices; Springer (Online ISBN 978-3-319-68025-5), pp. 225-280. **KEY:** BC

BC

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**267- AUTHORS (in order of authorship):** E. Pellicer, M. Lorenzetti, J. Fornell, M. D. Baró, S. Novak, J. Sort

**TITLE:** Progress beyond the state-of-the-art in the field of metallic materials for bioimplant applications

**JOURNAL/BOOK TITLE:** Biomaterials in Clinical Practice - Advances in Clinical Research and Medical Devices (Ed. F. Zivic), Springer (ISBN 978-3-319-68024-8), pp 25-46

**KEY:** BC

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**268- AUTHORS (in order of authorship):** E. Dislaki, J. Pokki, S. Pané, J. Sort, E. Pellicer

**TITLE:** Fabrication of sustainable hydrophobic and oleophilic pseudo-ordered macroporous Fe–Cu films with tunable composition and pore size via electrodeposition through colloidal templates

**JOURNAL/BOOK TITLE:** Applied Materials Today 12, 1-8 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 10.04

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**269\*- AUTHORS (in order of authorship):** A. Quintana, E. Menéndez, E. Isaraín-Chavez, J. Fornell, P. Solsona, F. Fauth, M. D. Baró, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Tunable magnetism in nanoporous CuNi alloys by reversible voltage-driven element-selective redox processes

**JOURNAL/BOOK TITLE:** Small 14, 1704396

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 15.1

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**270- AUTHORS (in order of authorship):** G. Fernández, J. Sort, R. Pleixats

**TITLE:** Nickel Nanoparticles Stabilized by Trisimidazolium Salts: Synthesis, Characterization and Application as Recyclable Catalysts for the Reduction of Nitroarenes

**JOURNAL/BOOK TITLE:** ChemistrySelect 3, 8597-8603

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.307

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**271\*- AUTHORS (in order of authorship):** Y. Feng, J. Fornell, H. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Pellicer, J. Sort

**TITLE:** Synthesis of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> and Fe-Mn oxide foams with highly tunable magnetic properties by the replication method from polyurethane templates

**JOURNAL/BOOK TITLE:** Materials 11, 280

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.6

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**272- AUTHORS (in order of authorship):** S. Danilova, J.E. Graves, E. Pellicer, J. Sort, A.J. Cobley

**TITLE:** Selective Metalization of Non-Conductive Materials By Patterning of Catalytic Particles and the Application of a Gradient Magnetic Field

**JOURNAL/BOOK TITLE:** ECS Transactions 85, 69-78

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**273\*- AUTHORS (in order of authorship):** S. Robbenolt, J. Fornell, A. Quintana, H. Zhang, E. Menéndez, E. Pellicer, J. Sort

**TITLE:** Structural and magnetic properties of Fe<sub>x</sub>Cu<sub>1-x</sub> sputtered thin films electrochemically treated to create nanoporosity for high surface area magnetic components

**JOURNAL/BOOK TITLE:** ACS Applied Nano Materials 1, 1675-1682

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.95

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**274\*- AUTHORS (in order of authorship):** J. Zhang, A. Quintana, E. Menéndez, M. Coll, E. Pellicer, J. Sort

**TITLE:** Electrodeposited Ni-based magnetic mesoporous films as smart surfaces for atomic layer deposition: an 'all-chemical' deposition approach toward 3D nanoengineered composite layers

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 10, 14877-14885

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**275\*- AUTHORS (in order of authorship):** S. Robbennolt, A. Quintana, E. Pellicer, J. Sort

**TITLE:** Large magnetoelectric effects mediated by electric-field-driven nanoscale phase transformations in sputtered (nanoparticulate) and electrochemically dealloyed (nanoporous) Fe-Cu films

**JOURNAL/BOOK TITLE:** Nanoscale 10, 14570-14578

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.3

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**276- AUTHORS (in order of authorship):** F. Mushtaq, X. Chen, M. Hoop, H. Torlakeik, E. Pellicer, J. Sort, C. Gattinoni, B. J. Nelson, S. Pané

**TITLE:** Piezoelectrically Enhanced Photocatalysis with BiFeO<sub>3</sub> Nanostructures for Efficient Water Remediation

**JOURNAL/BOOK TITLE:** iScience 4, 236-246

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.233

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**277- AUTHORS (in order of authorship):** E. Bertero, M. Hasegawa, S. Staubli, E. Pellicer, I. K. Hermann, J. Sort, J. Michler, L. Philippe

**TITLE:** Electrodeposition of amorphous Fe-Cr-Ni stainless steel alloy with high corrosion resistance, low cytotoxicity and soft magnetic properties

**JOURNAL/BOOK TITLE:** Surface and Coatings Technology 349, 745-751

**KEY:**

A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.158

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**278- AUTHORS (in order of authorship):** A. Mulone, A. Nicolenco, J. Fornell, E. Pellicer, N. Tsyntaru, H. Cesiulis, J. Sort, U. Klement

**TITLE:** Enhanced mechanical properties and microstructural modifications in electrodeposited Fe-W alloys through controlled heat treatments

**JOURNAL/BOOK TITLE:** Surface and Coatings Technology 350, 20-30

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.158

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**279\*- AUTHORS (in order of authorship):** E. Dislaki, S. Robbennolt, M. Campoy-Quiles, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Coercivity Modulation in Fe–Cu Pseudo-Ordered Porous Thin Films Controlled by an Applied Voltage: A Sustainable, Energy-Efficient Approach to Magnetoelectrically Driven Materials

**JOURNAL/BOOK TITLE:** Advanced Science 5, 1800499

**KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 17.521

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**280- AUTHORS (in order of authorship):** S. Zsurzsa, E. Pellicer, J. Sort, L. Péter, I. Bakonyi

**TITLE:** Electron microscopy characterization of electrodeposited homogeneous and multilayered nanowires in the Ni-Co-Cu system

**JOURNAL/BOOK TITLE:** Journal of The Electrochemical Society 165, D536-D542 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.316

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**281- AUTHORS (in order of authorship):** G. Chatzipirpiridis, C. de Marco, E. Pellicer, O. Ergeneman, J. Sort, B. J. Nelson, S. Pané

**TITLE:** Template-Assisted Electroforming of Fully Semi-Hard-Magnetic Helical Microactuators

**JOURNAL/BOOK TITLE:** Advanced Engineering Materials 20, 1800179 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.862

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**282- AUTHORS (in order of authorship):** A. Quintana, E. Menéndez, M.O. Liedke, M. Butterling, A. Wagner, V. Sireus, P. Torruella, S. Estradé, F. Peiró, J. Dendooven, C. Detavernier, P. D. Murray, D. A. Gilbert, K. Liu, E. Pellicer, J. Nogués, J. Sort

**TITLE:** Voltage-Controlled ON-OFF Ferromagnetism at Room Temperature in a Single Metal Oxide Film

**JOURNAL/BOOK TITLE:** ACS Nano 12, 10291-10300 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 15.881

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**283\*- AUTHORS (in order of authorship):** C. Navarro-Senent, J. Fornell, E. Isarain-Chavez, A. Quintana, E. Menendez, M. Foerster, L. Aballe, E. Weschke, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Large Magnetoelectric Effects in Electrodeposited Nanoporous Microdisks Driven by Effective Surface Charging and Magneto-Ionics

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 10, 44897-44905 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**284- AUTHORS (in order of authorship):** Z. Li, A. Aranda-Ramos, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, S. Lope Piedrafita, F. Pi, A. G. Roca, M. D. Baró, J. Sort, C. Nogués, J. Nogués, B. Sepúlveda

**TITLE:** Magnetically amplified photothermal therapies and multimodal imaging with magneto-plasmonic nanodomains

**JOURNAL/BOOK TITLE:** Applied Materials Today 12, 430-440 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.04

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**285- AUTHORS (in order of authorship):** Z. Li, A. Lopez-Ortega, A. Aranda-Ramos, J.L. Tajada, J. Sort, C. Nogués, P. Vavassori, J. Nogués, B. Sepúlveda

**TITLE:** Simultaneous Local Heating/Thermometry Based on Plasmonic Magneto-chromic Nanoheaters

**JOURNAL/BOOK TITLE:** Small 14, 1800868 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 15.1

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**286- AUTHORS (in order of authorship):** I. Fina, A. Quintana, X. Martí, F. Sánchez, M. Foerster, L. Aballe, J. Sort, J. Fontcuberta

**TITLE:** Reversible and magnetically unassisted voltage-driven switching of magnetization in FeRh/PMN-PT

**JOURNAL/BOOK TITLE:** Applied Physics Letters 113, 152901 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.971

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**287- AUTHORS (in order of authorship):** S. Scudino, J.J. Bian, H.S. Shahabi, D. Şopu, J. Sort, J. Eckert, G. Liu

**TITLE:** Ductile bulk metallic glass by controlling structural heterogeneities

**JOURNAL/BOOK TITLE:** Scientific Reports 8, 9174 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.99

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**288- AUTHORS (in order of authorship):** M. Guerrero, R. Pou, L. Bayés-García, M. Font-Bardia, J. Sort, J. Pons, J. A. Ayon

**TITLE:** Syntheses, supramolecular architectures and photoluminescence properties of Zn (II) complexes based on 3, 5-dihydroxybenzoic and pyridine/pyrazole derived ligands

**JOURNAL/BOOK TITLE:** Inorganic Chemistry Communications 96, 34-38 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.17

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**289- AUTHORS (in order of authorship):** S. Tanbakouei, J.M. Trigo-Rodrigues, E. Pellicer, J. Sort

**TITLE:** Mechanical Properties of Silicate-Rich Itokawa Regolith Particles

**JOURNAL/BOOK TITLE:** Lunar and Planetary Science Conference 49, 2083 **KEY:** A

**DATE OF PUBLICATION:** 2018

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** --

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**290- AUTHORS (in order of authorship):** S. Pané, J. Puigmartí-Luis, C. Bergeles, X.Z. Chen, E. Pellicer, J. Sort, V. Pocepcová, A. Ferreira, B. J. Nelson

**TITLE:** Imaging Technologies for Biomedical Micro- and Nanoswimmers

**JOURNAL/BOOK TITLE:** Advanced Materials Technologies 4, 1800575 **KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.86

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**291- AUTHORS (in order of authorship):** E. Menéndez, J. Sort, L. E. S. Silva, G. Johann, T. Dias  
**TITLE:** Unraveling the origin of training in granular Co-CoO exchange bias systems with buried antiferromagnetic constituents

**JOURNAL/BOOK TITLE:** Journal of Magnetism and Magnetic Materials 478, 170-174. **KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.993

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**292- AUTHORS (in order of authorship):** E. Pellicer, J. Malapeira, J. Sort  
**TITLE:** The European Training Network SELECTA reaches its end  
**JOURNAL/BOOK TITLE:** Transactions of the IMF 97, 3-4 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 1.244

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**293- AUTHORS (in order of authorship):** B. Jang, A. Hong, C. Alcantara, G. Chatzipiripiridis, X. Martí, E. Pellicer, J. Sort, Y. Harduf, Y. Or, B.J. Nelson, S. Pané  
**TITLE:** Programmable Locomotion Mechanisms of Nanowires with Semi-Hard Magnetic Properties Near a Surface Boundary  
**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 11, 3214-3223 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**294- AUTHORS (in order of authorship):** H. Cesiulis, N. Tsyntsaru, E. J. Podlaha, D. Li, J. Sort  
**TITLE:** Electrodeposition of Iron-Group Alloys into Nanostructured Oxide Membranes: Synthetic Challenges and Properties  
**JOURNAL/BOOK TITLE:** Current Nanoscience 15, 84-99 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** 1.52

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**295\*- AUTHORS (in order of authorship):** C. Navarro-Senent, A. Quintana, E. Menéndez, E. Pellicer, J. Sort  
**TITLE:** Electrolyte-gated magnetoelectric actuation: phenomenology, materials, mechanisms and prospective applications  
**JOURNAL/BOOK TITLE:** APL Materials 7, 030701 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.8

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**296- AUTHORS (in order of authorship):** E. Menéndez, V. Sireus, A. Quintana, I. Fina, B. Casals, R. Cichelero, M. Kataja, M. Stengel, G. Herranz, G. Catalán, M. D. Baró, S. Suriñach, J. Sort  
**TITLE:** Disentangling highly asymmetric magnetoelectric effects in engineered multiferroic heterostructures  
**JOURNAL/BOOK TITLE:** Physical Review Applied 12, 1, 014041. **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.9

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**297- AUTHORS (in order of authorship):** K. Cordero-Edwards, H. Kianirad, C. Canalias, J. Sort, G. Catalan  
**TITLE:** Flexoelectric fracture-ratchet effect in ferroelectrics  
**JOURNAL/BOOK TITLE:** Physical Review Letters 122, 135502 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.18

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**298\*- AUTHORS (in order of authorship):** S. Robbenolt, E. Menéndez, A. Quintana, A. Gomez, S. Auffret, V. Baltz, E. Pellicer, J. Sort  
**TITLE:** Reversible, electric-field induced magneto-ionic control of magnetism in mesoporous cobalt ferrite films  
**JOURNAL/BOOK TITLE:** Scientific Reports 9, 10804 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.99

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**299- AUTHORS (in order of authorship):** H. Zhang, J. Fornell, Y. Feng, I. Golvano, M. D. Baró, E. Pellicer, J. Sort  
**TITLE:** Inducing surface nanoporosity on Fe-based metallic glass matrix composites by selective dealloying  
**JOURNAL/BOOK TITLE:** Materials Characterization 153, 46-51 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.36

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**300- AUTHORS (in order of authorship):** A.Terzopoulou, M.Hoop, X. Z. Chen, A. M. Hirt, M. Charilaou, Y. Shen, F. Mushtaq, A. Pérez del Pino, C. Logofatu, L. Simonelli, A. J. deMello, C.J. Doonan, J. Sort, B. J. Nelson, S. Pané, J. Puigmartí-Luis  
**TITLE:** Mineralization-inspired synthesis of magnetic zeolitic imidazole framework composite  
**JOURNAL/BOOK TITLE:** Angewandte Chemie International Edition 58, 13550–13555  
**KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 16.8

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**301\*- AUTHORS (in order of authorship):** N. Kovalska, N. Tsyntaru, H. Cesiulis, A. Gebert, J. Fornell, E. Pellicer, J. Sort, W. Hansal, W. Kautek  
**TITLE:** Electrodeposition of Nanocrystalline Fe-P Coatings: Influence of Bath Temperature and Glycine Concentration on Structure, Mechanical and Corrosion Behavior  
**JOURNAL/BOOK TITLE:** Coatings 9, 189 **KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.864

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**302\*- AUTHORS (in order of authorship):** S. Robbenolt, A. Nicolenco, P. Mercier-Fernandez, S. Auffret, V. Baltz, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Electric Field Control of Magnetism in Iron Oxide Nanoporous Thin Films  
**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 11, 37338-37346  
**KEY:** A  
**DATE OF PUBLICATION:** 2019  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**303\*- AUTHORS (in order of authorship):** I. Golvano-Escobal, R. de Paz-Castanya, C. Alcantara, S. Pané, E. García-Lecina, J. Sort, E. Pellicer  
**TITLE:** Functional macroporous iron-phosphorous films by electrodeposition on colloidal crystal templates  
**JOURNAL/BOOK TITLE:** Electrochimica Acta 313, 211-222 **KEY:** A  
**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.9

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**304- AUTHORS (in order of authorship):** S.Tanbakouei, J. M. Trigo-Rodríguez, J. Sort, P. Michel, J. Blum, T. Nakamura, I. Williams

**TITLE:** Mechanical properties of particles from the surface of asteroid 25143 Itokawa

**JOURNAL/BOOK TITLE:** Astronomy & Astrophysics, 629, A119

**KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.2

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**305- AUTHORS (in order of authorship):** A. Nicolenco, A. Mulone, N. Imaz, N. Tsyntsaru, J. Sort, E. Pellicer, U. Klement, H. Cesiulis, E. García-Lecina

**TITLE:** Nanocrystalline electrodeposited Fe-W/Al<sub>2</sub>O<sub>3</sub> composites: effect of alumina sub-microparticles on the mechanical, tribological and corrosion properties

**JOURNAL/BOOK TITLE:** Frontiers in Chemistry 7, 241

**KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.994

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**306- AUTHORS (in order of authorship):** D. Bilican, S. Kurdi, Y. Zhu, P. Solsona, E. Pellicer, Z. Barber, L. Greer, J. Sort, J. Fornell

**TITLE:** Epitaxial versus polycrystalline shape memory Cu-Al-Ni thin films

**JOURNAL/BOOK TITLE:** Coatings 9, 308

**KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 2.864

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**307- AUTHORS (in order of authorship):** E. Bertero, C. V. Manzano, E. Pellicer, J. Sort, R. M. Ulfig, S. Mischler, J. Michler, L. Philippe

**TITLE:** Green' Cr(III)-glycine electrolyte for the production of FeCrNi coatings: electrodeposition mechanisms and role of by-products in terms of coating composition and microstructure

**JOURNAL/BOOK TITLE:** RSC Advances 9, 25762 - 25775

**KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.361

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**308- AUTHORS (in order of authorship):** A. Salicio-Paz, E. Pellicer, J. Sort, J. Fornell, R. Offoiaich, M. Lekka, E. García-Lecina

**TITLE:** Monolayered versus multilayered electroless NiP coatings: impact of the plating approach on the microstructure, mechanical and corrosion properties of the coatings

**JOURNAL/BOOK TITLE:** Surface and Coatings Technology, 368, 138-146

**KEY:** A

**DATE OF PUBLICATION:** 2019

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.82

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**309- AUTHORS (in order of authorship):** K. Eiler, S. Suriñach, J. Sort, E. Pellicer

**TITLE:** Mesoporous Ni-rich Ni-Pt Thin Films: Electrodeposition, Characterization and Performance toward Hydrogen Evolution Reaction in Acidic Media

**JOURNAL/BOOK TITLE:** Applied Catalysis B: Environmental, 265, 118597

**KEY:** A

**DATE OF PUBLICATION:** 2020  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 21.41

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**310- AUTHORS (in order of authorship):** A. Mulone, A. Nicolenco, N. Imaz, J. Fornell, J. Sort, U. Klement  
**TITLE:** Effect of heat treatments on the mechanical and tribological properties of electrodeposited Fe-W/Al<sub>2</sub>O<sub>3</sub> composites  
**JOURNAL/BOOK TITLE:** Wear, 448-449, 203232 **KEY:** A  
**DATE OF PUBLICATION:** 2020  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.92

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**311\*- AUTHORS (in order of authorship):** A. Nicolenco, A. Gómez, X.-Z. Chen, E. Menéndez, J. Fornell, S. Pané, E. Pellicer, J. Sort  
**TITLE:** Strain gradient mediated magnetoelectricity in Fe-Ga/P (VDF-TrFE) multiferroic bilayers integrated on silicon  
**JOURNAL/BOOK TITLE:** Applied Materials Today, 19, 100579 **KEY:** A  
**DATE OF PUBLICATION:** 2020  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.04

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**312- AUTHORS (in order of authorship):** M. Fernández-Barcia, B. Jang, C. C. J. Alcántara, U. Wolff, A. Gebert, M. Uhlemann, X. Chen, J. Puigmartí-Luis, J. Sort, E. Pellicer, S. Pané  
**TITLE:** Exploiting electrolyte confinement effects for the electrosynthesis of two-engine micromachines  
**JOURNAL/BOOK TITLE:** Applied Materials Today 19, 100629 **KEY:** A  
**DATE OF PUBLICATION:** 2020  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.04

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**313\*- AUTHORS (in order of authorship):** C. Navarro Senent, A. Quintana, E. Isarain-Chávez, E. Weschke, P. Yu, M. Coll, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Enhancing magneto-ionic effects in magnetic nanostructured films via conformal deposition of nanolayers with oxygen getter/donor capabilities  
**JOURNAL/BOOK TITLE:** ACS Appl. Materials & Interfaces 12, 14484 **KEY:** A  
**DATE OF PUBLICATION:** 2020  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**314\*- AUTHORS (in order of authorship):** S. Robbenolt, P. Yu, A. Nicolenco, P. Mercier Fernandez, M. Coll, J. Sort  
**TITLE:** Magneto-ionic control of magnetism in two-oxide nanocomposite thin films comprising mesoporous cobalt ferrite conformally nanocoated with HfO<sub>2</sub>  
**JOURNAL/BOOK TITLE:** Nanoscale 12, 5987 **KEY:** A  
**DATE OF PUBLICATION:** 2020  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.3

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**315\*- AUTHORS (in order of authorship):** K. Eiler, J. Fornell, C. Navarro-Senent, E. Pellicer, J. Sort

**TITLE:** Tailoring magnetic and mechanical properties of mesoporous single-phase Ni–Pt films by electrodeposition

**JOURNAL/BOOK TITLE:** Nanoscale 12, 7749

**KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 8.3

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**316\*- AUTHORS (in order of authorship):** J. de Rojas, A. Quintana, A. Lopeandía, J. Salguero, B. Muñiz, F. Ibrahim, M. Chshiev, A. Nicolenco, M. O. Liedke, M. Butterling, A. Wagner, V. Sireus, L. Abad, C. J. Jensen, K. Liu, J. Nogués, J. L. Costa-Krämer, E. Menéndez, J. Sort

**TITLE:** Voltage-driven motion of nitrogen ions: a new paradigm for magneto-ionics

**JOURNAL/BOOK TITLE:** Nature Communications 11, 5871

**KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 17.694

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**317- AUTHORS (in order of authorship):** K. Eiler, H. Krawiec, I. Kozina, J. Sort, E. Pellicer

**TITLE:** Electrochemical characterisation of multifunctional electrocatalytic mesoporous Ni–Pt thin films in alkaline and acidic media

**JOURNAL/BOOK TITLE:** Electrochimica Acta 359, 136952

**KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 6.9

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**318- AUTHORS (in order of authorship):** C. Navarro-Senent, S. Pané, J. Sort, E. Pellicer

**TITLE:** The order of addition and time matters: Impact of electrolyte processing on micelle-assisted electrosynthesis of mesoporous alloys

**JOURNAL/BOOK TITLE:** Electrochimica Acta 358, 136940

**KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 6.9

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**319- AUTHORS (in order of authorship):** A. Terzopoulou, X. Wang, X.Z. Chen, M. Palacios-Corella, C. Pujante, J. Herrero-Martín, X.-H. Qin, J. Sort, A.J. deMello, B.J. Nelson, J. Puigmartí-Luis, S. Pané

**TITLE:** Biodegradable Metal–Organic Framework-Based Microrobots (MOFBOTs)

**JOURNAL/BOOK TITLE:** Advanced Healthcare Materials 9, 2001031

**KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 11.092

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**320- AUTHORS (in order of authorship):** A. Salicio-Paz, A. Dalmau, H. Grande, A. Iriarte, J. Sort, E. Pellicer, J. Fornell, E. García-Lecina

**TITLE:** Impact of the multilayer approach on the tribocorrosion behaviour of nanocrystalline electroless nickel coatings obtained by different plating modes

**JOURNAL/BOOK TITLE:** Wear 456, 203384

**KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO

**IMPACT FACTOR:** 4.92

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**321\*- AUTHORS (in order of authorship):** J. de Rojas, A. Quintana, A. Lopeandía, J. Salguero, J.L. Costa-Krämer, L. Abad, M.O. Liedke, M. Butterling, A. Wagner, L. Henderick, J. Dendooven, C. Detavernier, J. Sort, E. Menéndez

**TITLE:** Boosting Room-Temperature Magneto-Ionics in a Non-Magnetic Oxide Semiconductor

**JOURNAL/BOOK TITLE:** Advanced Functional Materials 30 (36), 2003704 **KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 19.924

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**322\*- AUTHORS (in order of authorship):** E. Dislaki, M. Cialone, F. Celegato, P. Rizzi, P. Tiberto, S. Vadilonga, D. Töbrens, J. Sort, E. Pellicer

**TITLE:** Unraveling the properties of sharply defined submicron scale FeCu and FePd magnetic structures fabricated by electrodeposition onto electron-beam-lithographed substrates

**JOURNAL/BOOK TITLE:** Materials & Design, 193, 108826 **KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.4

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**323- AUTHORS (in order of authorship):** M. Cialone, M. Fernandez-Barcia, F. Celegato, M. Coisson, G. Barrera, M. Uhlemann, A. Gebert, J. Sort, E. Pellicer, P. Rizzi, P. Tiberto

**TITLE:** A comparative study of the influence of the deposition technique (electrodeposition versus sputtering) on the properties of nanostructured Fe<sub>70</sub>Pd<sub>30</sub> films

**JOURNAL/BOOK TITLE:** Science and Technology of Advanced Materials 21, 424 **KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.81

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**324\*- AUTHORS (in order of authorship):** M Foerster, E Menéndez, E Coy, A Quintana, C Gómez-Olivella, D. Esqué de los Ojos, O. Vallcorba, C. Frontera, L. Aballe, J. Nogués, J. Sort, I. Fina

**TITLE:** Local manipulation of metamagnetism by strain nanopatterning

**JOURNAL/BOOK TITLE:** Materials Horizons 7, 2056 **KEY:** A

**DATE OF PUBLICATION:** 2020

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 15.7

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**325\*- AUTHORS (in order of authorship):** M. Cialone, A. Nicolenco, S. Robbenolt, E. Menéndez, G. Rius, J. Sort

**TITLE:** Voltage-Induced ON Switching of Magnetism in Ordered Arrays of Non-Ferrimagnetic Nanoporous Iron Oxide Microdisks

**JOURNAL/BOOK TITLE:** Advanced Materials Interfaces 8, 2001143 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.3

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**326\*- AUTHORS (in order of authorship):** O. Careta, A. Salicio-Paz, E. Pellicer, E. Ibáñez, J. Fornell, E. García-Lecina, J. Sort, C. Nogués

**TITLE:** Electroless palladium-coated polymer scaffolds for electrical stimulation of osteoblast-like Saos-2 cells

**JOURNAL/BOOK TITLE:** International Journal of Molecular Sciences 22, 528 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.2

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**327\*- AUTHORS (in order of authorship):** A. Nicolenco, C. Navarro-Senent, J. Sort  
**TITLE:** Nanoporous Composites with Converse Magnetolectric Effects for Energy-Efficient Applications  
**JOURNAL/BOOK TITLE:** Encyclopedia of Material Composites (Elsevier) 2, 450. DOI: 10.1016/B978-0-12-803581-8.11870-3 **KEY:** BC  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** N/A **IMPACT FACTOR:** N/A

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**328- AUTHORS (in order of authorship):** A. Salicio-Paz, I. Ugarte, J. Sort, E. Pellicer, E. García-Lecina  
**TITLE:** Full Optimization of an Electroless Nickel Solution: Boosting the Performance of Low-Phosphorous Coatings  
**JOURNAL/BOOK TITLE:** Materials 14, 1501 **KEY:** A  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** 3.68

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**329\*- AUTHORS (in order of authorship):** A. Nicolenco, M. de h-Óra, C. Yun, J. MacManus-Driscoll, J. Sort  
**TITLE:** Strain-gradient effects in nanoscale-engineered magnetolectric materials  
**JOURNAL/BOOK TITLE:** APL Materials 9, 020903 **KEY:** A  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.635

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**330- AUTHORS (in order of authorship):** O. Careta, J. Fornell, E. Pellicer, E. Ibañez, A. Blanquer, J. Esteve, J. Sort, G. Murillo, C. Nogués  
**TITLE:** ZnO Nanosheet-Coated TiZrPdSiNb Alloy as a Piezoelectric Hybrid Material for Self-Stimulating Orthopedic Implants  
**JOURNAL/BOOK TITLE:** Biomedicines 9, 352 **KEY:** A  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.7

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**331\*- AUTHORS (in order of authorship):** L. Herrera Diez, R. Kruk, K. Leistner, J. Sort  
**TITLE:** Magnetolectric materials, phenomena, and devices  
**JOURNAL/BOOK TITLE:** APL Materials 9, 050401 **KEY:** A  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.635

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**332\*- AUTHORS (in order of authorship):** X. Liang, A. Matyushov, P. Hayes, V. Schell, C. Dong, H. Chen, Y. He, A. Will-Cole, E. Quandt, P. Martins, J. McCord, M. Medarde, S. Lanceros-Méndez, S. Van Dijken, N. X. Sun, J. Sort  
**TITLE:** Roadmap on Magnetolectric Materials and Devices  
**JOURNAL/BOOK TITLE:** IEEE Transactions on Magnetics 57, 400157 **KEY:** A  
**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 1.848

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**333- AUTHORS (in order of authorship):** S. Danilova, J.E. Graves, J. Sort, E. Pellicer, G.W.V. Cave, A. Cobley

**TITLE:** Electroless copper plating obtained by Selective Metallisation using a Magnetic Field (SMMF)

**JOURNAL/BOOK TITLE:** Electrochimica Acta 389, 138763 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.9

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**334\*- AUTHORS (in order of authorship):** A. Nicolenco, Y. Chen, N. Tsyntsaru, H. Cesiulis, E. Pellicer, J. Sort

**TITLE:** Mechanical, magnetic and magnetostrictive properties of porous Fe-Ga films prepared by electrodeposition

**JOURNAL/BOOK TITLE:** Materials & Design 208, 109915 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.4

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**335\*- AUTHORS (in order of authorship):** J. de Rojas, J. Salguero, F. Ibrahim, M. Chshiev, A. Quintana, A. Lopeandia, M.O. Liedke, M. Butterling, E. Hirschmann, A. Wagner, L. Abad, J.L. Costa-Krämer, E. Menéndez, J. Sort

**TITLE:** Magneto-Ionics in Single-Layer Transition Metal Nitrides

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 13, 30826 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**336\*- AUTHORS (in order of authorship):** C. Navau, J. Sort

**TITLE:** Exploiting random phenomena in magnetic materials for data security, logics, and neuromorphic computing: Challenges and prospects

**JOURNAL/BOOK TITLE:** APL Materials 9, 070903 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.635

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**337\*- AUTHORS (in order of authorship):** J. Sort, G. Rius

**TITLE:** Editorial for the Special Issue on "10<sup>th</sup> Anniversary of Nanomaterials—Recent Advances in Nanocomposite Thin Films and 2D Materials"

**JOURNAL/BOOK TITLE:** Nanomaterials 11, 2069 **KEY:** A

**DATE OF PUBLICATION:** 2021

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.719

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**338\*- AUTHORS (in order of authorship):** J. de Rojas, J. Salguero, A. Quintana, A. Lopeandia, M.O. Liedke, M. Butterling, A.G. Attallah, E. Hirschman, A. Wagner, L. Abad, J.L. Costa-Krämer, J. Sort, E. Menéndez

**TITLE:** Critical Role of Electrical Resistivity in Magnetoionics

**JOURNAL/BOOK TITLE:** Physical Review Applied 16 (3), 034042 **KEY:** A

**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.9

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**339\*- AUTHORS (in order of authorship):** Y. Chen, A. Nicolenco, P. Molet, A. Mihi, E. Pellicer, J. Sort  
**TITLE:** Magneto-ionic suppression of magnetic vortices  
**JOURNAL/BOOK TITLE:** Science and Technology of Advanced Materials 22, 972 **KEY:** A  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.81

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**340\*- AUTHORS (in order of authorship):** J. Sort, G. Rius  
**TITLE:** 10th Anniversary of Nanomaterials— Recent Advances in Nanocomposite Thin Films and 2D Materials", Nanomaterials book MDPI (ISBN 978-3-0365-2160-2)  
**JOURNAL/BOOK TITLE:** **KEY:** B  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** N/A

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**341- AUTHORS (in order of authorship):** J.M. Trigo-Rodríguez, E. Peña-Asensio, A. Rimola, J. Llorca, J. Ibáñez-Insa, J. Sort, J. Alonso-Azcárate  
**TITLE:** Caracterizando asteroides, cometas y superficies planetarias en base al estudio de sus meteoritos  
**JOURNAL/BOOK TITLE:** Astronomia 263, 24 **KEY:** A  
**DATE OF PUBLICATION:** 2021  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** N/A

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**342- AUTHORS (in order of authorship):** A. B.Calia, E. Masvidal-Codina, T. M. Smith, N. Schäfer, D. Rathore, E. Rodríguez-Lucas, X. Illa, J. M. De la Cruz, E. Del Corro, E. Prats-Alfonso, D. Viana, J. Bousquet, C. Hébert, J. Martínez-Aguilar, J. R. Sperling, M. Drummond, A. Halder, A. Dodd, K. Barr, S. Savage, J. Fornell, J. Sort, C. Guger, R. Villa, K. Kostarelos, R. C. Wykes, A. Guimerà-Brunet, J. A. Garrido  
**TITLE:** Full bandwidth electrophysiology of seizures and epileptiform activity enabled by flexible graphene micro-transistor depth neural probes  
**JOURNAL/BOOK TITLE:** Nature Nanotechnology 17, 301 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 40.523

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**343\*- AUTHORS (in order of authorship):** C. Navarro-Senent, K. Eiler, S. Pané, J. Sort, E. Pellicer  
**TITLE:** Lightweight macroporous L10-ordered Co–Pt electrodeposited films with semi-hard-magnetic properties  
**JOURNAL/BOOK TITLE:** Materials & Design 213, 110369 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 9.4

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**344- AUTHORS (in order of authorship):** S. L. Panahi, J. Fornell, C. Popescu, E. Pineda, J. Sort, P. Bruna

**TITLE:** Structure, mechanical properties and nanocrystallization of (FeCoCrNi)-(B,Si) high-entropy metallic glasses

**JOURNAL/BOOK TITLE:** Intermetallics, 141, 107432 **KEY:** A

**DATE OF PUBLICATION:** 2022

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 3.76

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**345\*- AUTHORS (in order of authorship):** S. Martins, J. de Rojas, Z. Tan, M. Cialone, A. Lopeandia, J. Herrero-Martín, J. Costa-Kramer, E. Menéndez, J. Sort

**TITLE:** Dynamic electric-field-induced magnetic effects in cobalt oxide thin films: towards magneto-ionic synapses

**JOURNAL/BOOK TITLE:** Nanoscale 14, 842 **KEY:** A

**DATE OF PUBLICATION:** 2022

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.3

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**346- AUTHORS (in order of authorship):** P. Bazarnik, A. Bartkowska, Y. Huang, K. Szluzak, B. Adamczyk-Cieslak, J. Sort, M. Lewandowska, T.G. Langdon

**TITLE:** Fabrication of hybrid nanocrystalline Ti-Al alloys by mechanical bonding through high-pressure torsion

**JOURNAL/BOOK TITLE:** Materials Science and Engineering A 833, 142549 **KEY:** A

**DATE OF PUBLICATION:** 2022

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.234

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**347\*- AUTHORS (in order of authorship):** E. Demirci, J. de Rojas, A. Quintana, I. Fina, E. Menéndez, J. Sort

**TITLE:** Voltage-driven strain-mediated modulation of exchange bias in Ir<sub>20</sub>Mn<sub>80</sub>/Fe<sub>80</sub>Ga<sub>20</sub>/Ta(011)-oriented PMN-32PT heterostructures

**JOURNAL/BOOK TITLE:** Appl. Phys. Lett. 120, 142406 **KEY:** A

**DATE OF PUBLICATION:** 2022

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** 3.816

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**348\*- AUTHORS (in order of authorship):** J. de Rojas, A. Quintana, G. Rius, C. Stefani, N. Domingo, J.L. Costa-Krämer, E. Menéndez, J. Sort

**TITLE:** Voltage control of magnetism with magneto-ionic approaches: Beyond voltage-driven oxygen ion migration

**JOURNAL/BOOK TITLE:** Appl. Phys. Lett. 120, 070501 **KEY:** A

**DATE OF PUBLICATION:** 2022

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** 3.816

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**349\*- AUTHORS (in order of authorship):** J. Sort

**TITLE:** Nanocomposite Materials: A Section of Nanomaterials

**JOURNAL/BOOK TITLE:** Nanomaterials 12, 203 **KEY:** A

**DATE OF PUBLICATION:** 2022

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.719

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**350- AUTHORS (in order of authorship):** J. Bai, J. Zhang, K. Eiler, Z. Yang, L. Fan, D. Yang, M. Zhang, Y. Hou, R. Guan, [J. Sort](#), E. Pellicer  
**TITLE:** Electrochemically Fabricated Surface-Mesostructured CuNi Bimetallic Catalysts for Hydrogen Production in Alkaline Media  
**JOURNAL/BOOK TITLE:** Nanomaterials 12, 118 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.719

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**351- AUTHORS (in order of authorship):** A. Gomez, W. Palyulin, G.V. Ryzhakov, N.V. Brilliantov, E.V. Dubrovin, A. Verdguer, [J. Sort](#)  
**TITLE:** Measurement of stress distribution at the nanoscale: Towards stress nanotomography  
**JOURNAL/BOOK TITLE:** Journal of the Mechanics and Physics of Solids 164, 104895  
**KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 5.471

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**352- AUTHORS (in order of authorship):** K. Eiler, L. Mølmen, L. Fast, P. Leisner, [J. Sort](#), E. Pellicer  
**TITLE:** Oxygen reduction reaction and PEM fuel cell performance of pulse electrodeposited Pt–Ni and Pt–Ni–Mo(O) nanoparticles  
**JOURNAL/BOOK TITLE:** Materials Today Energy 27, 101023  
**KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.38

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**353\*- AUTHORS (in order of authorship):** B. Prasad, S. Parkin, T. Prodromakis, C.-B. Eom, [J. Sort](#), J. L. MacManus-Driscoll  
**TITLE:** Material challenges for nonvolatile memory  
**JOURNAL/BOOK TITLE:** APL Mater. 10, 090401 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 6.635

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**354- AUTHORS (in order of authorship):** J. Wu, D. Folio, J. Zhu, B. Jang, X. Chen, J. Feng, P. Gambardella, [J. Sort](#), J. Puigmartí-Luis, O. Ergeneman, A. Ferreira, S. Pané  
**TITLE:** Motion Analysis and Real-Time Trajectory Prediction of Magnetically Steerable Catalytic Janus Micromotors  
**JOURNAL/BOOK TITLE:** Advanced Intelligent Systems 4, 2200192 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 7.2

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**355\*- AUTHORS (in order of authorship):** Z. Tan, S. Martins, M. Escobar, J. de Rojas, F. Ibrahim, M. Chshiev, A. Quintana, A. Lopeandia, J.L. Costa-Kramer, E. Menéndez, [J. Sort](#)  
**TITLE:** From Binary to Ternary Transition-Metal Nitrides: A Boost toward Nitrogen Magneto-Ionics  
**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 14, 44581 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 10.3

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**356\*- AUTHORS (in order of authorship):** J. Sort  
**TITLE:** Special Feature: Permanent and Long-Term Biodegradable Biomaterials  
**JOURNAL/BOOK TITLE:** Applied Sciences 12, 12874 **KEY:** A  
**DATE OF PUBLICATION:** 2022  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 0.772

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**357- AUTHORS (in order of authorship):** R. Fagotto Clavijo, M. Riba-Moliner, A. González-Campo, J. Sort, E. Pellicer, K. Eiler  
**TITLE:** PS-b-P4VP block copolymer micelles as a soft template to grow openly porous nickel films for alkaline hydrogen evolution  
**JOURNAL/BOOK TITLE:** Catalysis Today 423, 113916.  
**KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.70

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**358- AUTHORS (in order of authorship):** A. Fluksman, A. Lafuente, R. Braunstein, E. Steinberg, N. Friedman, Z. Yekhin, R. Hazan, Z. Li, J. Sort, A. Gomez-Roca, M. J. Esplandiu, J. Nogues, O. Benny, B. Sepulveda  
**TITLE:** Efficient tumor eradication at ultralow drug concentration via magnetically controlled drug delivery boosted by photothermal actuation using iron magneto-plasmonic nanodomes  
**JOURNAL/BOOK TITLE:** ACS Nano 17, 1946 **KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 18.027

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**359- AUTHORS (in order of authorship):** S. Martins, Z. Ma, X. Monfort, M. Sodupe, L. Santiago, E. Menéndez, E. Pellicer, J. Sort  
**TITLE:** Enhancing magneto-ionic effects in Co oxide films by electrolyte engineering  
**JOURNAL/BOOK TITLE:** Nanoscale Horizons 8, 118 **KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 10.989

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**360- AUTHORS (in order of authorship):** A. Bartkowska, O. Careta, A. Turner, A. Blanquer, E. Ibañez, M. Trobos, C. Nogués, E. Pellicer, J. Sort  
**TITLE:** Biodegradable porous FeMn(-xAg) alloys: assessment of cytocompatibility, mechanical, magnetic and antibiofilm properties  
**JOURNAL/BOOK TITLE:** Materials Advances 4, 616  
**KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** N/A

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**361- AUTHORS (in order of authorship):** M. Escobar, O. Careta, N. Fernández Navas, A. Bartkowska, L. A. Alberta, J. Fornell, P. Solsona, T. Gemming, A. Gebert, E. Ibañez, A. Blanquer, C. Nogués, J. Sort, E. Pellicer  
**TITLE:** Surface Modified  $\beta$ -Ti-18Mo-6Nb-5Ta (wt%) Alloy for Bone Implant Applications: Composite Characterization and Cytocompatibility Assessment

**JOURNAL/BOOK TITLE:** Journal of Functional Biomaterials 14, 94

**KEY:** A

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** N/A

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**362- AUTHORS (in order of authorship):** D. Raj, G. Barrera, F. Scaglione, F. Celegato, M. Cialone, M. Coïsson, P. Tiberto, J. Sort, P. Rizzi, E. Pellicer

**TITLE:** Electrochemical Synthesis, Magnetic and Optical Characterisation of FePd Dense and Mesoporous Nanowires

**JOURNAL/BOOK TITLE:** Nanomaterials 13, 403

**KEY:** A

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO **IMPACT FACTOR:** N/A

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**363\*- AUTHORS (in order of authorship):** Z. Tan, J. de Rojas, S. Martins, A. Lopeandia, A. Quintana, M. Cialone, J. Herrero-Martín, J. Meersschaut, A. Vantomme, J. L. Costa-Krämer, J. Sort, E. Menéndez

**TITLE:** Frequency-dependent stimulated and post-stimulated voltage control of magnetism in transition metal nitrides: towards brain-inspired magneto-ionics

**JOURNAL/BOOK TITLE:** Materials Horizons 10, 88

**KEY:** A

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** N/A

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**364\*- AUTHORS (in order of authorship):** Z. Tan, Z. Ma, L. Fuentes, M. O. Liedke, M. Butterling, A. G. Attallah, E. Hirschmann, A. Wagner, L. Abad, N. Casañ-Pastor, A. F. Lopeandia, E. Menéndez, J. Sort

**TITLE:** Regulating oxygen ion transport at the nanoscale to enable highly cyclable magneto-ionic control of magnetism

**JOURNAL/BOOK TITLE:** ACS Nano 17, 6973

**KEY:** A

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** N/A

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**365- AUTHORS (in order of authorship):** K. Eiler, J. Sort, E. Pellicer

**TITLE:** Catalysis: platinum-free

**JOURNAL/BOOK TITLE:** Encyclopedia of Electrochemical Power Sources, Elsevier, Second Edition

**KEY:** BC

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** N/A

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**366\*- AUTHORS (in order of authorship):** M. de h-Óra, A. Nicolenco, P. Monalisha, T. Maity, B. Zhu, S. Lee, Z. Sun, J. Sort, J. MacManus-Driscoll

**TITLE:** Highly cyclable voltage control of magnetism in cobalt ferrite nanopillars for memory and neuromorphic applications

**JOURNAL/BOOK TITLE:** APL Materials 11, 051105

**KEY:** A

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** N/A

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**367- AUTHORS (in order of authorship):** N. Kovalska, A. Mulone, J. Sort, U. Klement, G. Blugan, W. Hansal, W. Kautek  
**TITLE:** Electrodeposition of soft magnetic Fe-W-P alloy coatings from an acidic electrolyte  
**JOURNAL/BOOK TITLE:** Coatings 13, 801 **KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** N/A

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**368\*- AUTHORS (in order of authorship):** Z. Ma, L. Fuentes-Rodriguez, Z. Tan, E. Pellicer, L. Abad, J. Herrero-Martín, E. Menéndez, N. Casañ-Pastor, J. Sort  
**TITLE:** Wireless magneto-ionics: voltage control of magnetism by bipolar electrochemistry  
**JOURNAL/BOOK TITLE:** Nature Communications 14, 6486 **KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 16.6

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**369- AUTHORS (in order of authorship):** A. Bartkowska, A. B. Turner, A. Blanquer, A. Nicolenco, M. Trobos, C. Nogués, E. Pellicer, J. Sort  
**TITLE:** Accelerated biodegradation of FeMn porous alloy coated with ZnO: effect on cytocompatibility and antibiofilm properties  
**JOURNAL/BOOK TITLE:** Surface & Coatings Technology 471, 129886  
**KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 16.6

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**370\*- AUTHORS (in order of authorship):** A. Bartkowska, C. Lekka, L.A. Alberta, I. Spasojevic, E. Pellicer, J. Sort\*  
**TITLE:** Silver-induced  $\gamma \rightarrow \epsilon$  martensitic transformation in FeMn alloys: an experimental and computational study  
**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 966, 171640  
**KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 16.6

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**371\*- AUTHORS (in order of authorship):** P. Monalisha, Z. Ma, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** A Multilevel Magnetic Synapse Based on Voltage-Tuneable Magnetism by Nitrogen Ion Migration  
**JOURNAL/BOOK TITLE:** Advanced Electronic Materials 9, 8, 2300249.  
**KEY:** A  
**DATE OF PUBLICATION:** 2023  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 16.6

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**372\*- AUTHORS (in order of authorship):** O. Careta, A. Nicolenco, F. Perdikos, A. Blanquer, E. Ibáñez, E. Pellicer, C. Stefani, B. Sepúlveda B, J. Nogués, J. Sort, C. Nogués  
**TITLE:** Enhanced proliferation and differentiation of human osteoblasts by remotely controlled magnetic-field-induced electric stimulation using flexible substrates

**JOURNAL/BOOK TITLE:** ACS Applied Materials Interfaces 15, 58054

**KEY:** A

**DATE OF PUBLICATION:** 2023

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 16.6

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**373- AUTHORS (in order of authorship):** C. von Baeckmann, J. Martínez-Esaín, J. Suárez, L. Meng, J. Garcia-Masferrer, J. Faraudo, J. Sort, A. Carné-Sánchez, D. Maspoch

**TITLE:** Porous and Meltable Metal-Organic Polyhedra for the Generation and Shaping of Porous Mixed-Matrix Composites

**JOURNAL/BOOK TITLE:** Journal of the American Chemical Society 146, 7159

**KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 15.6

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**374- AUTHORS (in order of authorship):** T. Zakusylo, A. Quintana, V. Lenzi, J. P. B. Silva, L. Marques, J. L. Ortolá Yano, J. Lyu, J. Sort, F. Sánchez, I. Fina

**TITLE:** Robust multiferroicity and magnetic modulation of the ferroelectric imprint field in heterostructures comprising epitaxial  $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$  and Co

**JOURNAL/BOOK TITLE:** Materials Horizons 11, 2388

**KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 10.7

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**375\*- AUTHORS (in order of authorship):** D.A. Ochoa, E. Menéndez, J. López-Sánchez, A. del Campo, Z. Ma, I. Spasojevic, I. Fina, J.F. Fernnández, F. Rubio-Marcos, J. Sort, J.E. García

**TITLE:** Reversible optical control of magnetism in engineered artificial multiferroics

**JOURNAL/BOOK TITLE:** Nanoscale 16, 4900

**KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 5.1

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**376- AUTHORS (in order of authorship):** H. Tan, A. Quintana, N. Dix, S. Estandía, J. Sort, F. Sánchez, I. Fina

**TITLE:** Photovoltaic-driven dual optical writing and non-destructive voltage-less reading of polarization in ferroelectric  $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$  for energy efficient memory devices

**JOURNAL/BOOK TITLE:** Nano Energy 123, 109384

**KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 17.1

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**377- AUTHORS (in order of authorship):** E. Peña-Asensio, J. M. Trigo-Rodríguez, J. Sort, J. Ibáñez-Insa, A. Rimola

**TITLE:** Mechanical properties of minerals in lunar and HED meteorites from nanoindentation testing: implications for space mining

**JOURNAL/BOOK TITLE:** Meteoritics & Planetary Science 59, 1297

**KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.4

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**378- AUTHORS (in order of authorship):** Y. Chen, J. Zhang, J. Sort, E. Pellicer, R. Guan  
**TITLE:** Magnetic field-controlled bubble templated CuNi foam films and their performance towards hydrogen evolution reaction in alkaline media  
**JOURNAL/BOOK TITLE:** International Journal of Hydrogen Energy 59, 625-634.  
**KEY:** A  
**DATE OF PUBLICATION:** 2024  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.3

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**379- AUTHORS (in order of authorship):** M. Escobar, V. Hoffmann, T. Gemming, M. Kim, S. Pané, J. Sort, E. Pellicer  
**TITLE:** One and two-step electrodeposition of composite films of calcium-deficient hydroxyapatite matrix with nanoscale Ag- and Zn-based particles  
**JOURNAL/BOOK TITLE:** Surfaces and Interfaces 44, 103671 **KEY:** A  
**DATE OF PUBLICATION:** 2024  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.3

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**380\*- AUTHORS (in order of authorship):** Z. Ma, P. Monalisha, Z. Tan, E. Pellicer, M. O. Liedke, M. Butterling, A. G. Attallah, E. Hirschmann, A. Wagner, F. Ibrahim, M. Chshiev, E. Menéndez, J. Sort  
**TITLE:** Optimizing Magneto-ionic Performance in Structure/Composition-Engineered Ternary Nitrides  
**JOURNAL/BOOK TITLE:** Journal of Materiomics 10, 870 **KEY:** A  
**DATE OF PUBLICATION:** 2024  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 9.6

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**381\*- AUTHORS (in order of authorship):** N. López-Pintó, C. J. Jensen, Z. Chen, Z. Tan, Z. Ma, M. O. Liedke, M. Butterling, A. Wagner, J. Herrero-Martín, E. Menéndez, J. Nogués, K. Liu, J. Sort  
**TITLE:** Room-Temperature Solid-State Nitrogen-Based Magneto-Ionics in  $\text{Co}_x\text{Mn}_{1-x}\text{N}$  Films.  
**JOURNAL/BOOK TITLE:** Advanced Functional Materials 34, 2404487 **KEY:** A  
**DATE OF PUBLICATION:** 2024  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 19

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**382- AUTHORS (in order of authorship):** P. Nizet, F. Chiabrera, N. López-Pintó, N. Alayo, P. Langner, S. Valencia, A. Fraile Rodríguez, F. Baiutti, A. Smekhova, A. Morata, J. Sort, A. Tarancón  
**TITLE:** Analog control of  $\text{La}_{0.5}\text{Sr}_{0.5}\text{FeO}_{3-\delta}$  electrical properties through oxygen deficiency induced magnetic transition  
**JOURNAL/BOOK TITLE:** Applied Physics Reviews 11, 041426 **KEY:** A  
**DATE OF PUBLICATION:** 2024  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 11.6

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**383\*- AUTHORS (in order of authorship):** P. Monalisha, M. Ameziane, I. Spasojevic, E. Pellicer, R. Mansell, E. Menéndez, S. Van Dijken, J. Sort  
**TITLE:** Magnetoionics for Synaptic Devices and Neuromorphic Computing: Recent Advances, Challenges, and Future Perspectives  
**JOURNAL/BOOK TITLE:** Small Science 4 (2024) 2400133 **KEY:** A  
**DATE OF PUBLICATION:** 2024  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.3

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**384- AUTHORS (in order of authorship):** Z. Ma, S. Martins, Z. Tan, S. Chen, E. Montebianco, M. O. Liedke, M. Butterling, A. G. Attallah, E. Hirschmann, A. Wagner, L. Herrera Diez, E. Pellicer, D. Ravelosona, [J. Sort](#), E. Menéndez

**TITLE:** Controlling magneto-ionics by defect engineering through light ion implantation

**JOURNAL/BOOK TITLE:** Advanced Functional Materials 34, 2312827 **KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 19

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**385\*- AUTHORS (in order of authorship):** Z. Ma, Z. Tan, A. Quintana, I. Spasojevic, N. López-Pintó, F. Sánchez, I. Fina, J. Herrero-Martín, E. Menéndez, [J. Sort](#)

**TITLE:** Ionic control of magnetism in all-solid-state CoOx/yttria-stabilized zirconia heterostructures

**JOURNAL/BOOK TITLE:** Applied Physics Letters 124, 202404 **KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 3.6

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**386- AUTHORS (in order of authorship):** K Eiler, S Pané, M Döbeli, A Müller, C Vockenhuber, [J. Sort](#), E Pellicer

**TITLE:** Electrosynthesis-Induced Pt Skin Effect in Mesoporous Ni-Rich Ni–Pt Thin Films for Hydrogen Evolution Reaction

**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 16 (2024) 42305 **KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.2

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**387- AUTHORS (in order of authorship):** E. Peña-Asensio, J. M. Trigo-Rodríguez, [J. Sort](#), J. Ibáñez-Insa, A. Rimola

**TITLE:** Machine learning applications on lunar meteorite minerals: from classification to mechanical properties prediction

**JOURNAL/BOOK TITLE:** International Journal of Mining Science and Technology 34, 1283

**KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 13.7

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**388- AUTHORS (in order of authorship):** P. Grèbol-Tomàs, J. M. Trigo-Rodríguez, J. Ibáñez-Insa, E. Peña-Asensio, R. Cuscó, I. Weber, [J. Sort](#)

**TITLE:** Nanoindentation of lunar basalts: mechanical properties of the NWA 12008 meteorite

**JOURNAL/BOOK TITLE:** Meteoritics & Planetary Science 59, A164. **KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 2.4

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**389- AUTHORS (in order of authorship):** X. Iturbe, ... [J. Sort](#), et al.

**TITLE:** Neuromorphic technology insights in Spain

**JOURNAL/BOOK TITLE:** IEEE 24th International Conference on Nanotechnology (NANO), Gijon, Spain, 2024, pp. 1-11, doi: 10.1109/NANO61778.2024.10669907 **KEY:** A

**DATE OF PUBLICATION:** 2024

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** --

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**390\*- AUTHORS (in order of authorship):** I. Spasojevic, Z. Ma, A. Barrera, F. Celegato, A. Magni, S. Ruiz-Gómez, M. Foerster, A. Palau, P. Tiberto, K. S. Buchanan, [J. Sort](#)  
**TITLE:** Magneto-ionic vortices: voltage-reconfigurable swirling-spin analog-memory nanomagnets  
**JOURNAL/BOOK TITLE:** Nature Communications 16, 1990 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 15.7

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**391- AUTHORS (in order of authorship):** K. Eiler, F. Alcaide, E. García-Lecina, [J. Sort](#), E. Pellicer  
**TITLE:** Mesoporous Ni–Pt nanoparticles on Ni foam by electrodeposition: Dual porosity for efficient alkaline hydrogen evolution  
**JOURNAL/BOOK TITLE:** International Journal of Hydrogen Energy 99, 448. **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.3

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**392\*- AUTHORS (in order of authorship):** A. Arredondo-López, K. Eiler, A. Quintana, G. Rius, I. Spasojevic, A. Salicio, A. Nicolenco, M. Lekka, E. García-Lecina, G. Brunin, D. Waroquiers, G.-M. Rigagnese, E. Pellicer, E. Menéndez, [J. Sort](#)  
**TITLE:** Composition-Dependent Voltage-Driven OFF-ON Switching of Ferromagnetism in Co–Ni Oxide Microdisks  
**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces 17 (2025) 9500. **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 8.2

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**393\*- AUTHORS (in order of authorship):** Z. Ma, A. Arredondo-López, J. Wrona, J. Herrero-Martín, J. Langer, O. Berthold, E. Pellicer, E. Menéndez, [J. Sort](#)  
**TITLE:** Magneto-ionic engineering of antiferromagnetically RKKY-coupled multilayers  
**JOURNAL/BOOK TITLE:** Advanced Materials 37, 2415393 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 26.8

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**394- AUTHORS (in order of authorship):** K. Eiler, [J. Sort](#), E. Pellicer  
**TITLE:** Fuel Cells – Polymer-Electrolyte Membrane Fuel Cell | Catalysts: Non-Platinum  
**JOURNAL/BOOK TITLE:** Encyclopedia of Electrochemical Power Sources 5, 111 **KEY:** BC  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO X **IMPACT FACTOR:** --

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**395\*- AUTHORS (in order of authorship):** [J. Sort](#)  
**TITLE:** Beyond storage: The expanding role of magnetism in intelligent computing  
**JOURNAL/BOOK TITLE:** APL Materials 13, 070401 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:** 4.5

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**396- AUTHORS (in order of authorship):** K. Eiler, [J. Sort](#), E. Pellicer  
**TITLE:** Magnetic field-enhanced hydrogen electrocatalysis: Unveiling the role of electrolyte concentration  
**JOURNAL/BOOK TITLE:** International Journal of Hydrogen Energy 162, 150601  
**KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.3

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**397- AUTHORS (in order of authorship):** A. B. Turner, [J. Sort](#), C. Nogués, E. Pellicer, A. B. Jerez, M. Trobos  
**TITLE:** Cytocompatibility and antimicrobial properties of silver nanoparticle-decorated hydroxyapatite-coated TiMoNbTa alloy  
**JOURNAL/BOOK TITLE:** Surfaces and Interfaces 72, 106934 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.3

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**398- AUTHORS (in order of authorship):** P. Grèbol-Tomàs, J. Ibáñez-Insa, J.M. Trigo-Rodríguez, E. Peña-Asensio, R. Oliva, D. Díaz-Anichtchenko, P. Botella, J. Sánchez-Martín, R. Turnbull, D. Errandonea, A. Liang, C. Popescu, [J. Sort](#)  
**TITLE:** Mechanical softening of lunar olivine probed via nanoindentation and high-pressure X-ray diffraction measurements  
**JOURNAL/BOOK TITLE:** Geoscience Frontiers 16, 102110 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 8.9

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**399\*- AUTHORS (in order of authorship):** [J. Sort](#), K Everschor-Sitte, D Ielmini, M Lira-Cantu  
**TITLE:** Energy-efficient memory materials  
**JOURNAL/BOOK TITLE:** APL Materials 13, 100401 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 4.5

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**400- AUTHORS (in order of authorship):** R de Paz-Castany, N López-Pintó, K Eiler, GBG Stenning, A Hubin, E. Pellicer, [J. Sort](#)  
**TITLE:** Smart design of porous Ni and Ni–W films with tunable mechanical and magnetic performance  
**JOURNAL/BOOK TITLE:** Journal of Alloys and Compounds 1046, 184863 **KEY:** A  
**DATE OF PUBLICATION:** 2025  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:** 6.3

---

**401\*- AUTHORS (in order of authorship):** L Martínez Armesto, Z Ma, H Tan, E Pellicer, I Spasojevic, [J. Sort](#)  
**TITLE:** Decoupling Magnetic and Electric Field Control in Magneto-Ionic Materials for Energy-Efficient Brain-Inspired Memory Devices  
**JOURNAL/BOOK TITLE:** ACS Applied Materials & Interfaces (in press) **KEY:** A  
**DATE OF PUBLICATION:** 2026  
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES  NO  **IMPACT FACTOR:**

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**402\*- AUTHORS (in order of authorship):** Z. Tan, Z. Ma, S. Privitera, M. O. Liedke, E. Hirschmann, A. Wagner, J. L. Costa-Krämer, A. Quintana, A. Garcia-Tort, J. Herrero-Martín, Y. F. Mei, X. Z. Chen, H. Tan, I. Fina, F. Sánchez, A. Arredondo-López, F. Ibrahim, M. Chshiev, E. Longo, M. Rovirola, F. Macià, A. F. Lopeandia, J. Nogués, E. Pellicer, J. Sort, E. Menéndez

**TITLE:** Magneto-ionic control of magnetism through voltage-driven carbon transport

**JOURNAL/BOOK TITLE:** Nature Communications (in press)

**KEY:** A

**DATE OF PUBLICATION:** 2026

**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:**

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**403\*- AUTHORS (in order of authorship):** K. Eiler, H. Tan, A. Arredondo, P. Solsona, E. Pellicer, J. Sort

**TITLE:** Proton-driven ferromagnetic switching of CoO in flexible magneto-ionic cells

**JOURNAL/BOOK TITLE:** Journal of Materiomics (in press)

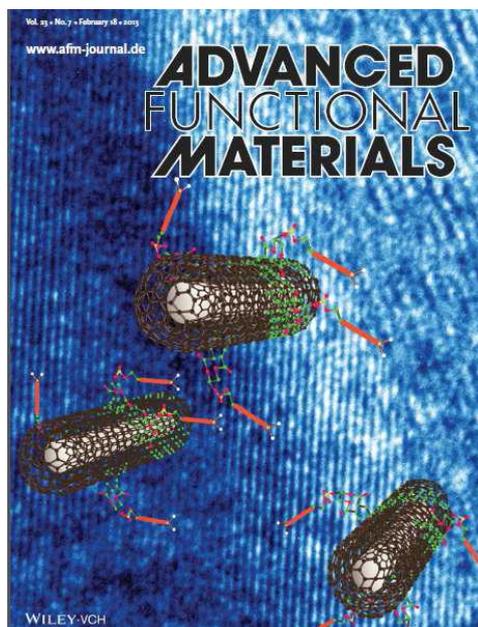
**KEY:** A

**DATE OF PUBLICATION:** 2026

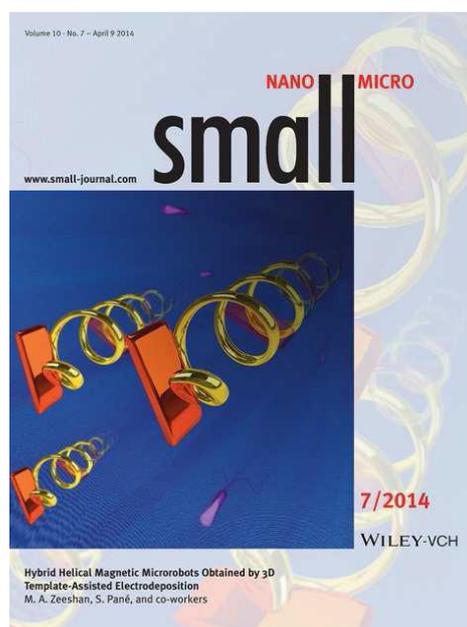
**JOURNAL WITHIN THE 25% HIGHER IMPACT FACTOR IN ITS KNOWLEDGE AREA AT THE YEAR OF PUBLICATION:** YES X NO  **IMPACT FACTOR:**

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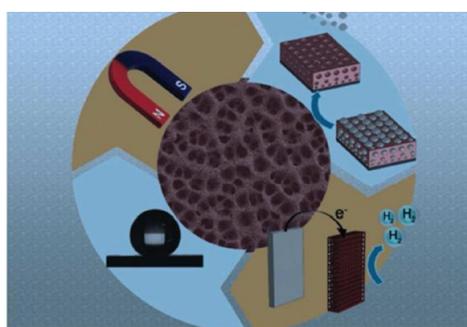
# Journal Covers



**Inside Front Cover of Advanced Functional Materials**, Issue February 2013: *Graphite Coating of Iron Nanowires for Nanorobotic Applications: Synthesis, Characterization and Magnetic Wireless Manipulation*



**Inside Front Cover of Small**, Issue April 2014: *Hybrid helical magnetic microrobots obtained by 3D template-assisted electrodeposition*



Showcasing research from the Group of Smart Nanoengineered Materials, Nanomechanics and Nanomagnetism, Universitat Autònoma de Barcelona, Spain.

Electrodeposition of magnetic, superhydrophobic, non-stick, two-phase Cu–Ni foam films and their enhanced performance for hydrogen evolution reaction in alkaline water media

We electrodeposit two-phase Cu–Ni magnetic metallic foams (MMFs) with tunable compositions and morphologies by taking advantage of the hydrogen co-evolution as a source of micro/nanoporosity. The physico-chemical properties (e.g. ferromagnetic behaviour, superhydrophobicity and electrochemical activity towards hydrogen evolution) of the as-prepared MMFs were investigated.

As featured in:

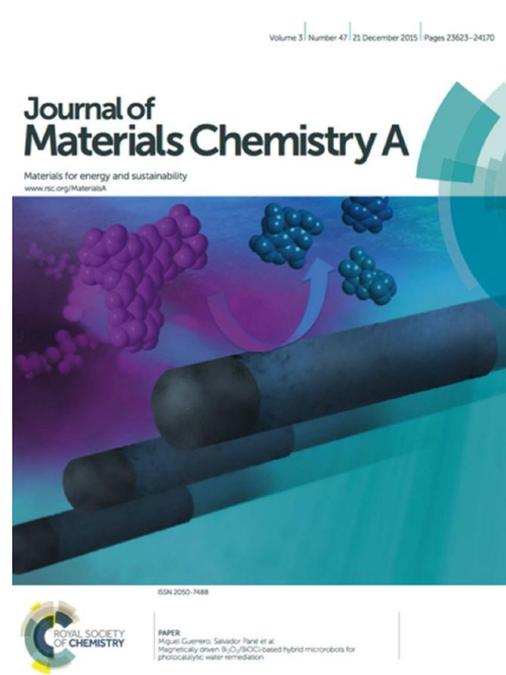
Nanoscale

See E. Pellicer, J. Sort et al. Nanoscale, 2014, 6, 12490.



www.rsc.org/nanoscale

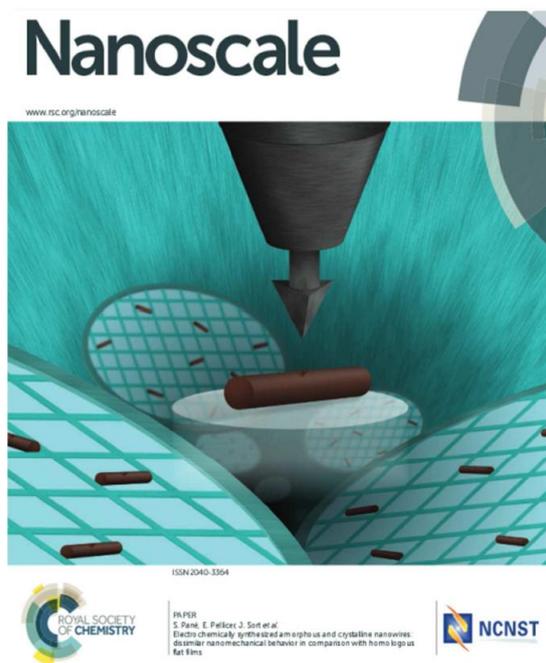
**Inside Back Cover of Nanoscale**, Issue November 2014: *Electrodeposition of magnetic, superhydrophobic, non-stick, two phase Cu–Ni foam films and their enhanced performance for hydrogen evolution reaction in alkaline water media*



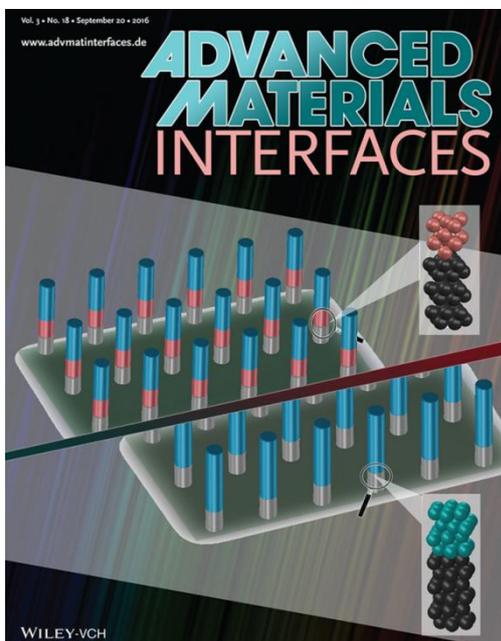
**Inside Front Cover of Journal of Materials Chemistry A**, Issue December 2015: *Magnetically Driven Bi<sub>2</sub>O<sub>3</sub>/BiOCl-Based Hybrid Microrobots for Photocatalytic Water Remediation*



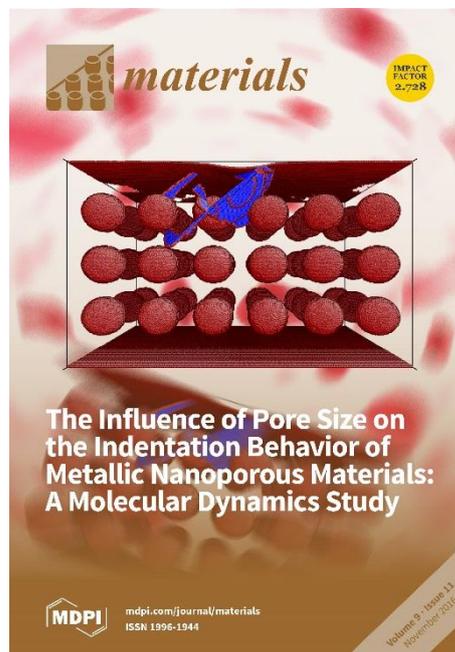
**Front Cover of Journal of Sol-Gel Science and Technology**, Issue November 2016: *Composite films combining electrospun fiber network and epitaxial oxide by chemical solution deposition*



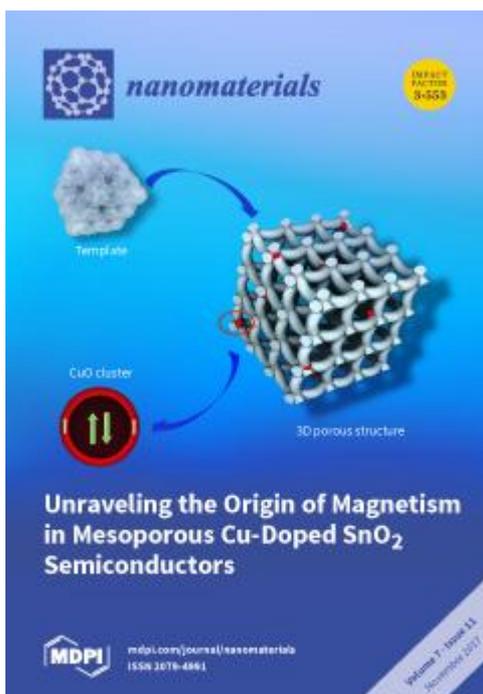
**Front Cover of Nanoscale**, Issue January 2016: *Electrochemically Synthesized Amorphous and Crystalline Nanowires: Dissimilar Nanomechanical Behavior in Comparison to Homologous Flat Films*



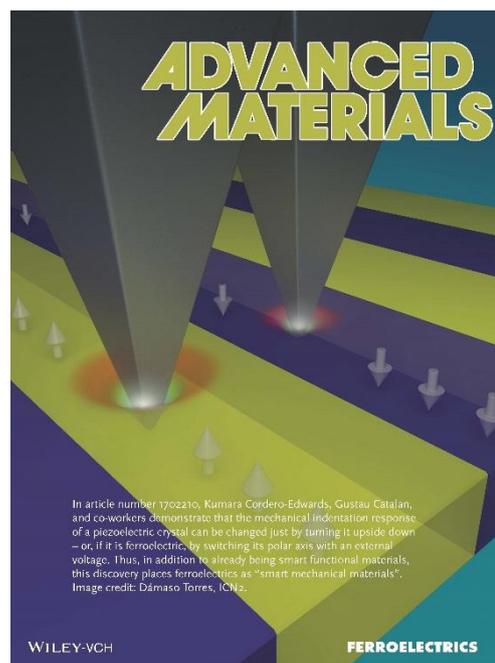
**Back Cover of Advanced Materials Interfaces**, Issue September 2016: *Toward Robust Segmented Nanowires: Understanding the Impact of Crystallographic Texture on the Quality of Segment Interfaces in Magnetic Metallic Nanowires*



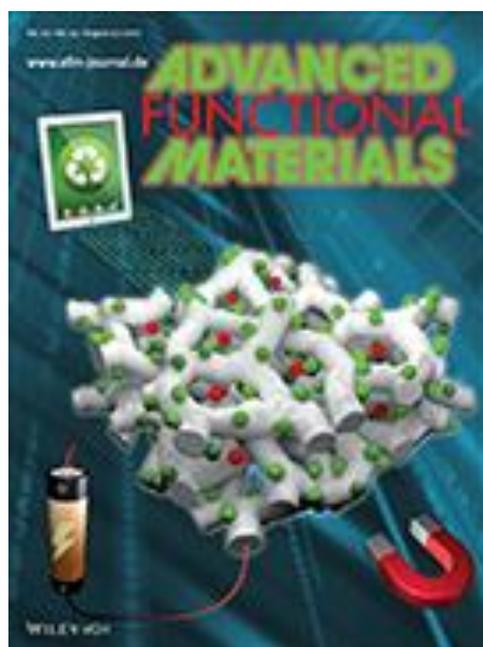
**Front Cover of Materials**, Issue May 2016: *The Influence of Pore Size on the Indentation Behavior of Metallic Nanoporous Materials: A Molecular Dynamics Study*



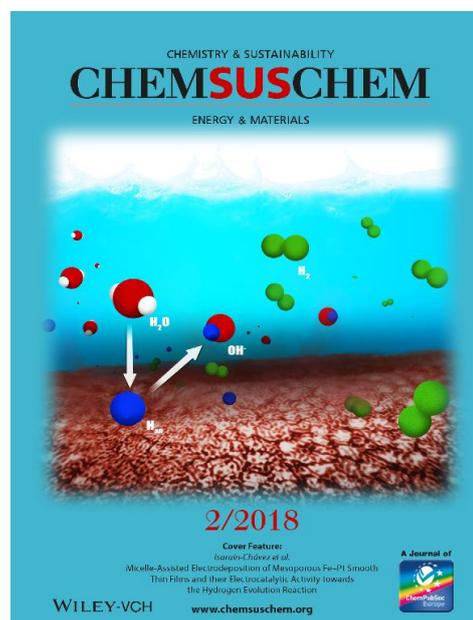
**Front Cover of *Nanomaterials***, volume 7, Issue 11, November 2017: Unraveling the Origin of Magnetism in Mesoporous Cu-doped SnO<sub>2</sub> Semiconductors



**Frontispiece of *Advanced Materials***, Issue October 2017: *Ferroelectrics: Ferroelectrics as Smart Mechanical Materials (Adv. Mater. 37/2017)*



**Back Cover, *Adv. Funct. Mater.* 32/2017:** Magnetic Actuation: Voltage-Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energy-Efficient Magnetic Actuation



**Cover Feature, *ChemSusChem*. 2/2018:** Micelle Assisted Electrodeposition of Mesoporous Fe-Pt smooth Thin Films and their Electrocatalytic Activity towards the Hydrogen Evolution Reaction

## Invited Presentations in Conferences

**1.- AUTHORS:** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Enhancement of Coercivity by Mechanical Alloying Ferromagnetic And Antiferromagnetic materials"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM 99  
**PUBLICATION:** Materials Science Forum, 343 (2000) 812-818  
**MEETING PLACE:** Dresden, Germany  
**YEAR:** 1999

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**2.- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Exchange coupling enhancement of the room temperature coercivity in ball milled antiferromagnetic - ferromagnetic composites"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** NANOS 2000  
**PUBLICATION:**  
**MEETING PLACE:** Sendai, Japan  
**YEAR:** 2000

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**3.- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró, E. Chappel, F. Dupont, G. Chouteau  
**TITLE:** "Structural and Magnetic characterization of ball milled hard magnetic (SmCo<sub>5</sub>) + antiferromagnetic (NiO, CoO) powders"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM 2001  
**PUBLICATION:** Materials Science Forum 368-388 (2002) 465  
**MEETING PLACE:** Ann Arbor, Michigan, USA  
**YEAR:** 2001

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**4.- AUTHORS:** J. Nogués, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Coercivity enhancement in ferromagnetic-antiferromagnetic composites"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** II Reunión Nacional de Física del Estado Sólido  
**PUBLICATION:**  
**MEETING PLACE:** Calella Barcelona, Spain  
**YEAR:** 2002

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**5.- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Coercivity enhancement of Sr-ferrites in ferromagnetic-antiferromagnetic composites processed by ball milling and subsequent heat treatments"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM2002  
**PUBLICATION:** Journal of Metastable and Nanocrystalline Materials 15-16 (2003)  
**MEETING PLACE:** Seoul, Korea  
**YEAR:** 2002

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**6.- AUTHORS:** J. Nogués, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, S. de Brion, G. Chouteau, V. Skumryev, G.C. Hadjipanayis, E. Pina, J.M. González, A. Hernando  
**TITLE:** "Coercivity and squareness enhancement by ferromagnetic-antiferromagnetic coupling"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** International Conference on Magnetism, ICM 2003  
**PUBLICATION:**  
**MEETING PLACE:** Rome, Italy  
**YEAR:** 2003

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**7.- AUTHORS:** J. Sort, J. Nogués, A. Zhilyaev, M. Zielinska, S. Suriñach, J. S. Muñoz, M. Wojcik, E. Jedryka, S. Nadolski, M.D. Baró  
**TITLE:** "Severe plastic deformation effects induced in cobalt by ball milling and high pressure torsion"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM2003  
**PUBLICATION:**  
**MEETING PLACE:** Foz do Iguaçu, Brazil  
**YEAR:** 2003

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**8.- AUTHORS:** J. Nogués, J. Sort, V. Langlais, S. Doppiu, S. Suriñach, J.S. Muñoz, M.D. Baró, V. Skumryev, G.C. Hadjipanayis, S. de Brion, G. Chouteau  
**TITLE:** "Coercivity enhancement in antiferromagnetic-ferromagnetic (oxide-metal) composites"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** IUMRS-International Conference on Advanced Materials  
**PUBLICATION:**  
**MEETING PLACE:** Yokohama, Japan  
**YEAR:** 2003

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**9.- AUTHORS:** J. Nogués, V. Langlais, J. Sort, S. Doppiu, B. Dieny, Ch. Laurent, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Structural and magnetic properties of metallic-oxide nanocompounds obtained from H<sub>2</sub> reduction of oxides"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Variety of oxide materials and properties, VOMP  
**PUBLICATION:**  
**MEETING PLACE:** Tsukuba, Japan  
**YEAR:** 2003

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**10.- AUTHORS:** J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, M. Wojcik, E. Jedryka, S. Nadolski, N. Shedulko, J. Nogués  
**TITLE:** "Role of stacking faults in the structural and magnetic properties of ball milled Co"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Materials Science and Technology 2003 (Fall Meeting of the TMS Society)  
**PUBLICATION:**  
**MEETING PLACE:** Chicago, USA  
**YEAR:** 2003

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**11.- AUTHORS:** J. Sort  
**TITLE:** "Comparative study of exchange bias properties in ferromagnetic-antiferromagnetic dots of different shapes prepared by different nanostructuring techniques"

**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Seminar at the Universidad Autónoma de Madrid  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2004

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**12- AUTHORS:** V. Langlais, S. Doppiu, J. Sort, B. Dieny, Ch. Laurent, S. Suriñach, V. Skumryev, J.S. Muñoz, M.D. Baró, J. Nogues  
**TITLE:** "Synthesis and characterization of ferromagnetic - antiferromagnetic nanocomposites by controlled reduction under H<sub>2</sub> atmosphere "  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM2004  
**PUBLICATION:**  
**MEETING PLACE:** Sendai, Japón  
**YEAR:** 2004

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**13- AUTHORS:** J. Sort, V. Baltz, B. Rodmacq, B. Dieny  
**TITLE:** "High density applications of the exchange bias phenomena in thin films and patterned nanostructures "  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Internacional Workshop on Exchange Biased Magnetic Nanostructures, IWEBMN  
**PUBLICATION:**  
**MEETING PLACE:** Anglet, France  
**YEAR:** 2004

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**14- AUTHORS:** J. Nogués, V. Skumryev, S. Stoyanov, Y. Zhang, G. Hadjipanayis, D. Givord, K. Liu, C. Leighton, H. Masuda, K. Nishio, I.V. Roshchin, I.K. Schuller, J. Esenmenger, J. Sort, J.S. Muñoz, S. Suriñach, M.D. Baró  
**TITLE:** "Overcoming thermal fluctuations in ferromagnetic nanostructures using exchange bias"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** AVS 51st International Symposium & Exhibition  
**PUBLICATION:**  
**MEETING PLACE:** Anaheim, USA  
**YEAR:** 2004

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**15- AUTHORS:** J. Sort, S. Suriñach, J.S. Muñoz, M. Wojcik, E. Jedryka, S. Nadolski, N. Shedulko, J. Nogués, M. D. Baró  
**TITLE:** "Structural and magnetic properties of cobalt subjected to ball milling and high pressure torsion"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Nanostructured Materials Mechanics, NMM  
**PUBLICATION:**  
**MEETING PLACE:** San Petersburgo, Rusia  
**YEAR:** 2004

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**16- AUTHORS:** J. Nogués, V. Skumryev, S. Stoyanov, Y. Zhang, G. Hadjipanayis, D. Givord, V. Langlais, J. Sort, S. Doppiu, Ch. Laurent, J.S. Muñoz, S. Suriñach, M.D. Baró  
**TITLE:** "Exchange bias in nanoparticles"

**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** XIII International Materials Research Congress  
**PUBLICATION:**  
**MEETING PLACE:** Cancún, Mexico  
**YEAR:** 2004

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**17- AUTHORS:** J. Sort, F. Garcia, V. Baltz, S. Auffret, B. Rodmacq, M. Fraune, G. Guntherodt, M. D. Baro, J. Nogues, B. Dieny  
**TITLE:** "Exchange bias effects in systems with perpendicular-to-plane magnetic anisotropy"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** 49th MMM Conference  
**PUBLICATION:**  
**MEETING PLACE:** Jacksonville, Florida, USA  
**YEAR:** 2004

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**18- AUTHORS:** V. Skumryev, S. Syoyanov, Y. Zhang, G. Hadjipanayis, D. Givord, J. Sort, S. Suriñach, J. Muñoz, M. D. Baró, J. Nogués  
**TITLE:** "Overcoming Thermal Fluctuations in Ferromagnetic Nanostructures Using Exchange Bias"  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** International Conference on Fine Particle Magnetism 2004  
**PUBLICATION:**  
**MEETING PLACE:** London, England  
**YEAR:** 2004

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**19- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J. S. Muñoz, I. Margiolaki, A. Fitch, M. Wojcik, E. Jedryka, S. Nadolski, A. Zhilyaev, M.D. Baró  
**TITLE:** Microstructure, phase transformations, mechanical and magnetic properties of disordered cobalt  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM 2005  
**PUBLICATION:**  
**MEETING PLACE:** Paris, France  
**YEAR:** 2005

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**20- AUTHORS:** J. Sort  
**TITLE:** Exchange bias effects in multilayer systems with perpendicular magnetic anisotropy  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Seminario Invitado en Argonne National Laboratory  
**PUBLICATION:**  
**MEETING PLACE:** Argonne (USA)  
**YEAR:** 2005

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**21- AUTHORS:** J. Nogues, J. Sort, A. Hoffmann, S. H. Chung, K. Buchanan, M. Grimsditch, M. D. Baró, B. Dieny  
**TITLE:** Exchange biased vortices  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** XXVIII Encontro Nacional de Física da Matéria Condensada  
**PUBLICATION:**  
**MEETING PLACE:** Santos, Brazil

**YEAR:** 2005

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**22- AUTHORS:** D. Givord, C. Macovei, F. Ingwiller, V. M. T. S. Barthem, J. Nogués, V. Skumryev, J. Sort

**TITLE:** Exchange coupled nanostructured magnetic materials

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Mater, materials and devices (MMD 2005)

**PUBLICATION:**

**MEETING PLACE:** Genova, Italy

**YEAR:** 2005

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**23- AUTHORS:** J. Sort, A. Hoffmann, S.H. Chung, K. Buchanan, G. Salazar, M. Grimsditch, M.D. Baró, B. Dieny, J. Nogués

**TITLE:** Exchange biased vortices in lithographed ferromagnetic-antiferromagnetic dots

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** XIV International Materials Research Congress

**PUBLICATION:**

**MEETING PLACE:** Cancún, Mexico

**YEAR:** 2005

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**24- AUTHORS:** M. Gich, A. Roig, J. Sort, C. Frontera, M. Popocivi, V. Skumryev, W.A.A. Macedo, H.R. Rechenberg, E. Molins, J. Nogués

**TITLE:** Large room temperature coercivity in  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** International Conference on Composites and NanoEngineering, ICCE-12

**PUBLICATION:**

**MEETING PLACE:** Tenerife, Spain

**YEAR:** 2005

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**25- AUTHORS:** J. Sort

**TITLE:** Exchange bias in Ferromagnetic-Antiferromagnetic Nanostructures

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** US-Spain workshop on nanomaterials

**PUBLICATION:**

**MEETING PLACE:** Segovia, Spain

**YEAR:** 2005

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**26- AUTHORS:** J. Sort, S. Brück, M.D. Baró, S. Suriñach, G. Salazar-Álvarez, V. Baltz, B. Dieny, J. Nogués

**TITLE:** Exploiting exchange bias length scales to fully tailor double-shifted hysteresis loops

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** IV Reunión Nacional de física del estado sólido

**PUBLICATION:**

**MEETING PLACE:** Alicante, Spain

**YEAR:** 2006

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**27- AUTHORS:** J. Sort, A. Concustell, E. Menéndez, S. Suriñach, K. V. Rao, J. Farran, S. C. Deevi, J. Nogués, M. D. Baró

**TITLE:** Arrays of Micron and Submicron Magnetic Structures Prepared by Nanoindentation of Non-Magnetic Substrates

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials, ISMANAM 2006

**PUBLICATION:**

**MEETING PLACE:** Warsaw, Poland

**YEAR:** 2006

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**28- AUTHORS:** J. Nogués, J. Sort, A. Hoffmann, K. S. Buchanan, S. H. Chung, M. Grimsditch, V. Novosad, G. Salazar-Alvarez, M. D. Baró, B. Dieny

**TITLE:** New asymmetric reversal mode in ferromagnetic-antiferromagnetic dots due to imprinted displaced vortices

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Internacional Conference on Magnetism

**PUBLICATION:**

**MEETING PLACE:** Kyoto, Japan

**YEAR:** 2006

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**29- AUTHORS:** G. Salazar-Alvarez, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M.D. Baró, J. Nogués

**TITLE:** Enhancing the superparamagnetic blocking temperature of nanoparticles with bi-magnetic core-shell structures

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Complex oxide materials for new technologies (symposium K of the European MRS Fall Meeting)

**PUBLICATION:**

**MEETING PLACE:** Warsaw, Poland

**YEAR:** 2006

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**30- AUTHORS:** J. Sort

**TITLE:** Magnetization reversal in micron and submicron dots composed of ferromagnetic-antiferromagnetic bilayers

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** International Workshop on Nanomagnetism

**PUBLICATION:**

**MEETING PLACE:** Coma-Ruga

**YEAR:** 2006

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**31- AUTHORS:** J. Nogués, J. Sort, V. Langlais, V. Skumryev, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** Exchange bias in nanostructures: at the heart of spintronic devices

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** 6th European Conference on Magnetic Sensors and Actuators

**PUBLICATION:**

**MEETING PLACE:** Bilbao

**YEAR:** 2006

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**32- AUTHORS:** J. Nogués, G. Salazar-Alvarez, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M.D. Baró

**TITLE:** Enhancing the Superparamagnetic Blocking Temperature of Ferrimagnetic Oxide Nanoparticles with Bi-Magnetic Core-Shell Structures

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** 14th Int. Conference on Composites and Nano-engineering

**PUBLICATION:**

**MEETING PLACE:** Boulder (USA)

**YEAR:** 2006

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**33- AUTHORS:** J. Nogués, J. Sort, S. Brück, A. Hoffmann, K.S. Buchanan, G. Salazar-Alvarez, V. Baltz, S.H. Chung, V. Novosad, S. Suriñach, J. S. Muñoz, B. Dieny, M. D. Baró

**TITLE:** Control of the hysteresis loops in ferromagnetic-antiferromagnetic systems by imprinting different magnetization states in the antiferromagnet

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Joint European Magnetic Symposia 2006

**PUBLICATION:**

**MEETING PLACE:** San Sebastián, Spain

**YEAR:** 2006

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**34- AUTHORS:** J. Sort

**TITLE:** Exchange biased magnetic vortices

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Invited Seminar at the Forschungszentrum Rossendorf EV, Inst. Ion Beam Phys. & Mat. Res.

**PUBLICATION:**

**MEETING PLACE:** Rossendorf, Germany

**YEAR:** 2006

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**35- AUTHORS:** J. Sort, K.S. Buchanan, M. Grimsdicht, S.-H. Chung, V. Novosad, A. Hoffmann, G. Salazar-Alvarez, M. D. Baró, B. Dieny, J. Nogués

**TITLE:** Controlling magnetic vortices through exchange bias

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Joint European Magnetic Symposia 2006

**PUBLICATION:**

**MEETING PLACE:** San Sebastián

**YEAR:** 2006

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**36- AUTHORS:** J. Nogués, G. Salazar-Alvarez, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M.D. Baró

**TITLE:** Tuning of the superparamagnetic blocking temperature of gamma-Fe<sub>2</sub>O<sub>3</sub> nanoparticles in bi-magnetic core-shell structures

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Eighth International Workshop on Non-Crystalline Solids

**PUBLICATION:**

**MEETING PLACE:** Gijón

**YEAR:** 2006

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**37- AUTHORS:** J. Sort, A. Concustell, E. Menéndez, S. Suriñach, K. V. Rao, S. C. Deevi, J. Nogués and M. D. Baró

**TITLE:** Periodic Arrays of Micron and Submicron Magnetic Structures Prepared by Nanoindentation of a Non-magnetic Intermetallic Compound

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** III Workshop on Metastable and Nanocrystalline Materials - Nanomat 2006

**PUBLICATION:**

**MEETING PLACE:** Río de Janeiro, Brazil

**YEAR:** 2006

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**38- AUTHORS:** D. Givord, C. Macovei, F. Ingwiller, V.M.T.S. Barthem, J. Nogués, V. Skumryev, J. Sort

**TITLE:** Exchange coupled nanostructured magnetic materials

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** III Workshop on Metastable and Nanocrystalline Materials - Nanomat 2006

**PUBLICATION:**

**MEETING PLACE:** Río de Janeiro, Brazil

**YEAR:** 2006

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**39- AUTHORS:** V. Baltz, J. Sort, A. Bollero, S. Landis, B. Rodmacq, B. Dieny

**TITLE:** Finite size effects on the exchange bias properties of ferromagnetic/antiferromagnetic bilayers

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** IEEE International Magnetics Conference

**PUBLICATION:**

**MEETING PLACE:** San Diego, California, USA

**YEAR:** 2006

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**40- AUTHORS:** J. Nogués, G. Salazar-Alvarez, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M. D. Baró

**TITLE:** Tuning of the superparamagnetic blocking temperature of  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles in bi-magnetic core-shell structures

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Internacional Open Seminar on Oxide and Nano-magnetics

**PUBLICATION:**

**MEETING PLACE:** Tsu, Japan

**YEAR:** 2006

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**41- AUTHORS:** J. Sort

**TITLE:** Imprinting domains and/or peculiar spin configurations in antiferromagnets

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Invited Seminar at University of California – Davis

**PUBLICATION:**

**MEETING PLACE:** Davis, USA

**YEAR:** 2006

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**42- AUTHORS:** J. Nogués, G. Salazar-Alvarez, J. Sort, S. Suriñach, M. D. Baró

**TITLE:** Size-dependent exchange bias in inverted core-shell (antiferromagnetic-ferrimagnetic) nanoparticles

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Magnetic Nanoparticles: Challenges and Future Prospects

**PUBLICATION:**

**MEETING PLACE:** Leiden (Lorentz Center) Netherlands

**YEAR:** 2007

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**43- AUTHORS:** A Concustell, J. Sort, N Van Steenberge, S Suriñach, and MD Baró  
**TITLE:** Using nanoindentation to investigate the deformation behavior of bulk metallic glasses and nanocomposite materials  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM 2007  
**PUBLICATION:**  
**MEETING PLACE:** Korfu, Greece  
**YEAR:** 2007

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**44- AUTHORS:** J. Sort  
**TITLE:** Exchange biased vortices in submicron magnetic dots  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Department of Energy review meeting of the Center for Nanoscale Materials at Argonne National Laboratory: Scientific Highlight Talk  
**PUBLICATION:**  
**MEETING PLACE:** Argonne, USA  
**YEAR:** 2007

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**45- AUTHORS:** J. Nogués, J. Sort, V. Langlais, V. Skumryev, S. Suriñach, M.D. Baró  
**TITLE:** Exchange bias in nanostructures: at the heart of spintronic devices  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** 17th International Vacuum Congress  
**PUBLICATION:**  
**MEETING PLACE:** Stockholm, Sweden  
**YEAR:** 2007

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**46- AUTHORS:** J. Sort, A. Hoffmann, K. S. Buchanan, B. Rodmacq?, M. Miron, G. Salazar-Álvarez, E. Menéndez, V. Novosad, P. Gambardella, A. Weber, L. Heyderman, M.D. Baró, B. Dieny, J. Nogués  
**TITLE:** Controlling magnetic vortices in circular and elliptical dots using exchange bias  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** 52<sup>nd</sup> Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Tampa, USA  
**YEAR:** 2007

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**47- AUTHORS:** A. Hoffmann, J. Sort, K.S. Buchanan, K.Y. Guslienko, G. Salazar-Alvarez, E. Menendez, S.H. Chung, V. Novosad, M. Grimsditch, J.E. Pearson, A. Bollero, M.D. Baró, M. Miron, B. Rodmacq, B. Dieny, J. Nogués  
**TITLE:** Exchange biased vortices  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** IEEE Magnetic Multilayers 2007  
**PUBLICATION:**  
**MEETING PLACE:** Perth, Australia  
**YEAR:** 2007

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**48- AUTHORS:** J. Sort, E. Menéndez, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Nous materials per a l'enregistrament magnètic d'alta densitat

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Jornada de Nanotecnologia de l'Institut d'Estudis Catalans

**PUBLICATION:**

**MEETING PLACE:** Barcelona, Spain

**YEAR:** 2007

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**49- AUTHORS:** J. Sort, E. Menedez, M.O. Leidke, T. Strache, J. Fassbender, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach, A. Concustell, K.V. Rao, S.C. Deevi, M.D. Baró, J. Nogués

**TITLE:** Micro- and nanoscale patterning of paramagnetic FeAl alloys by means of nanoindentation or selective ion irradiation

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** First Workshop on Nanolithography and their applications

**PUBLICATION:**

**MEETING PLACE:** Zaragoza, Spain

**YEAR:** 2007

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**50- AUTHORS:** J. Nogués, G. Salazar-Alvarez, A. Lopez-Ortega, J. Sort, S. Suriñach, M.D. Baró

**TITLE:** Exchange bias in inverted AFM core/FM shell nanoparticles

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Workshop on Recent Trends on Nanomagnetism

**PUBLICATION:**

**MEETING PLACE:** Heverlee, The Netherlands

**YEAR:** 2008

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**51- AUTHORS:** J. Sort

**TITLE:** Direct generation of nanoscale ferromagnetic dots by selective ion irradiation of paramagnetic FeAl alloy and austenitic stainless steel.

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Invited Seminar at MINATEC (Grenoble)

**PUBLICATION:**

**MEETING PLACE:** Grenoble, France

**YEAR:** 2008

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**52- AUTHORS:** E. Menedez, J. Sort, M.O. Liedke, J. Fassbender, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach, A. Concustell, K.V. Rao, S.C. Deevi, M.D. Baró, J. Nogués

**TITLE:** Micro-/nano-scale magnetic patterning of paramagnetic FeAl intermetallic alloys

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Winter School – Women in Nano

**PUBLICATION:**

**MEETING PLACE:** Krannjska Gora, Slovenia

**YEAR:** 2008

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**53- AUTHORS:** J. Sort

**TITLE:** Using nanoindentation to investigate the mechanical behaviour of metallic glasses and nanocomposite materials

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Invited Seminar at the Universidade Federal de São Carlos

**PUBLICATION:**

**MEETING PLACE:** São Carlos, Brazil  
**YEAR:** 2008

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**54- AUTHORS:** E. Menendez, J. Sort, M.O. Liedke, T. Strache, J. Fassbender, W. Möller, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach, S.C. Deevi, K.V. Rao, J. Sommerlatte, K. Nielsch, M.D. Baró, J. Nogués  
**TITLE:** Direct nanoscale magnetic lithography in on FeAl alloys by means of ion irradiation  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Trends in Nanotechnology  
**PUBLICATION:**  
**MEETING PLACE:** Oviedo, Spain  
**YEAR:** 2008

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**55- AUTHORS:** J. Sort  
**TITLE:** Using nanoindentation to investigate the mechanical behaviour of metallic glasses and nanocomposite materials  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Invited Seminar at the Universidade Federal de São Carlos  
**PUBLICATION:**  
**MEETING PLACE:** São Carlos, Brazil  
**YEAR:** 2008

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**56- AUTHORS:** J. Sort, J. Fornell, S. Suriñach, M. D. Baró  
**TITLE:** Caracterización de las propiedades mecánicas de vidrios metálicos mediante nanoindentación  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Reunión de Nanomecánica y nanoindentación  
**PUBLICATION:**  
**MEETING PLACE:** Universitat Politècnica de Catalunya, Barcelona, Spain  
**YEAR:** 2008

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**57- AUTHORS:** J. Nogués, V. Skumryev, J. Sort, S. Stoyanov, D. Givord  
**TITLE:** Exchange-bias stabilized magnetism in Co nanoparticles  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** International Conference on Clusters on Surfaces  
**PUBLICATION:**  
**MEETING PLACE:** Rostock, Germany  
**YEAR:** 2008

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**58- AUTHORS:** J. Sort, E. Menedez, M.O. Liedke, T. Strache, J. Fassbender, W. Möller, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach, K.V. Rao, S.C. Deevi, M.D. Baro, J. Nogués  
**TITLE:** Magnetic lithography on paramagnetic FeAl alloys by selective ion irradiation  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** International Conference on Nanostructured Materials - NANO2008  
**PUBLICATION:**  
**MEETING PLACE:** Rio de Janeiro, Brazil  
**YEAR:** 2008

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**59- AUTHORS:** J. Sort

**TITLE:** Mechanical characterization of metallic glasses and nanocomposite materials using nanoindentation

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Invited Seminar at the Universitat Politècnica de Catalunya (UPC - Campus de la Mediterrània)

**PUBLICATION:**

**MEETING PLACE:** Castelldefels, Spain

**YEAR:** 2008

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**60- AUTHORS:** E. Menedez, J. Sort, M.O. Liedke, T. Strache, J. Fassbender, W. Möller, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach, K.V. Rao, S.C. Deevi, M.D. Baro, J. Nogués  
**TITLE:** Nano-scale magnetic patterning of paramagnetic FeAl intermetallic alloys by ion irradiation

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** International Conference on Ion Beam Modification of Materials

**PUBLICATION:**

**MEETING PLACE:** Dresden, Germany

**YEAR:** 2008

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**61- AUTHORS:** I.B. Golosovsky, G. Salazar-Alvarez, J. Sort, J. Nogués, M.A. Gonzalez

**TITLE:** Diffraction studies of the core-shell system

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Petersburg Nuclear Physics Institute Winter School

**PUBLICATION:**

**MEETING PLACE:** St. Petersburg, Russia

**YEAR:** 2008

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**62- AUTHORS:** E. Menéndez, J. Sort, M.O. Liedke, T. Strache, J. Fassbender, W. Möller, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach,, S.C. Deevi, K.V. Rao, J. Sommerlatte, K. Nielsch, J. Nogués, M.D. Baró

**TITLE:** Magnetic lithography on FeAl alloys by means of ion irradiation

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** International Symposium on Metastable and Mechanically Alloyed Materials

**PUBLICATION:**

**MEETING PLACE:** Buenos Aires, Argentina

**YEAR:** 2008

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**63- AUTHORS:** I.B. Golosovsky, G. Salazar-Alvarez, J. Sort, J. Nogués, M.A. Gonzalez

**TITLE:** Diffraction studies of the novel heterogenic nanosystems 'core-shell' with 'exchange bias'

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** Low Dimensional Systems International Meeting

**PUBLICATION:**

**MEETING PLACE:** Rostov-on-Don, Russia

**YEAR:** 2008

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**64- AUTHORS:** J. Nogués, A. López-Ortega, M. Estrader, G. Salazar-Alvarez, J. Sort, S. Suriñach, M.D. Baró

**TITLE:** Exchange bias in inverted antiferromagnetic-ferrimagnetic core -shell nanoparticles

**TYPE OF PRESENTATION:** INVITED

**CONFERENCE:** The Villa Conference of Complex Oxide Heterostructures  
**PUBLICATION:**  
**MEETING PLACE:** Orlando, USA  
**YEAR:** 2008

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**65- AUTHORS:** A. Hoffmann, J. Sort, K.S. Buchanan, K.Y. Guslienko, G. Salazar-Alvarez, E. Menendez, S.H. Chung, V. Novosad, M. Grimsditch, J.E. Pearson, A. Bollero, M.D. Baro, M. Miron, B. Rodmaq, B. Dieny, J. Nogués  
**TITLE:** Exchange biased vortices  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** Asian Magnetism Conference  
**PUBLICATION:**  
**MEETING PLACE:** Busan, North Korea  
**YEAR:** 2008

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**66- AUTHORS:** A. Hoffmann, J. Sort, K.S. Buchanan, K.Y. Guslienko, G. Salazar-Alvarez, E. Menendez, S.H. Chung, V. Novosad, M. Grimsditch, J.E. Pearson, S.D. bader, A. Bollero, M.D. Baro, M. Miron, B. Rodmaq, B. Dieny, J. Nogués  
**TITLE:** Exchange biased vortices  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** International Workshop on Vortex Dynamics in Confined Magnetic Thin Films  
**PUBLICATION:**  
**MEETING PLACE:** Busan, North Korea  
**YEAR:** 2008

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**67- AUTHORS:** J. Nogués, G. Salazar-Alvarez, A. Lopez-Ortega, J. Sort, S. Suriñach, M.D. Baro  
**TITLE:** Exchange bias in inverted AFM-core/FM-shell nanoparticle  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** First Nordic Workshop on Spintronics and Nanomagnetism  
**PUBLICATION:**  
**MEETING PLACE:** Gimo, Sweden  
**YEAR:** 2008

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**68- AUTHORS:** J. Sort  
**TITLE:** Comparative study of the thermal, elastic and mechanical properties of newly developed rare-earth bulk metallic glasses  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** “Jornada sobre vidres metàl·lics i materials amorfs” at the Universitat Politècnica de Catalunya (UPC - Campus de la Mediterrània)  
**PUBLICATION:**  
**MEETING PLACE:** Castelldefels, Spain  
**YEAR:** 2009

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**69- AUTHORS:** J. Fornell, A. Concustell, S. Suriñach, W. H. Li, N. Cuadrado, A. Gebert, M. D. Baró, J. Sort  
**TITLE:** Mechanical behaviour of Ti-Zr-Ni-Cu-Be bulk metallic glass  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** ISMANAM 2009  
**PUBLICATION:**

**MEETING PLACE:** Beijing, China  
**YEAR:** 2009

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**70- AUTHORS:** J. Sort, J. Fornell, S. Suriñach, M. D. Baró  
**TITLE:** Comparative study of the thermal, elastic and mechanical properties of various families of metallic glasses  
**TYPE OF PRESENTATION:** INVITED  
**CONFERENCE:** 11<sup>th</sup> International Conference on Advanced Materials (ICAM 2009)  
**PUBLICATION:**  
**MEETING PLACE:** Rio de Janeiro, Brazil  
**YEAR:** 2009

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**71- AUTHORS:** J. Sort, E. Menéndez, A. Varea, F. Pi, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Nanoscale Magnetic Lithography on FeAl alloys induced by nanoindentation and ion irradiation  
**TYPE OF PRESENTATION:** INVITED  
**CONGRESS:** 11<sup>th</sup> International Conference on Advanced Materials (ICAM 2009)  
**PUBLICATION:**  
**MEETING PLACE:** Rio de Janeiro, Brazil  
**YEAR:** 2009

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**72- AUTHORS:** J. Nogués, I. Golosovski, G. Salazar-Álvarez, A. López-Ortega, M. Estrader, J. Sort, S. Suriñach, M. D. Baró  
**TITLE:** Exchange bias and proximity effects in 'inverted' antiferromagnetic/ferrimagnetic core/shell nanoparticles  
**TYPE OF PRESENTATION:** INVITED  
**CONGRESS:** Nano2009: Perspectives in Nanoscience and Nanotechnology  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian, Spain  
**YEAR:** 2009

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**73- AUTHORS:** A. López-Ortega, M. Estrader, D. Tobia, E. Winkler, G. Salazar-Alvarez, I. Golosovsky, J. Sort, S. Suriñach, R.D. Zysler, M.D. Baró, J. Nogués  
**TITLE:** Size dependent magnetic properties of bi-magnetic "core-shell" passivated MnO nanoparticles  
**TYPE OF PRESENTATION:** INVITED  
**CONGRESS:** International Conference in Magnetism  
**PUBLICATION:**  
**MEETING PLACE:** Karlsruhe (Germany)  
**YEAR:** 2009

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**74- AUTHORS:** M. D. Baró, J. Fornell, S. Suriñach, Weihuo Li, A. Gebert, J. Sort  
**TITLE:** Dissimilar mechanical properties between various families of bulk metallic glasses  
**TYPE OF PRESENTATION:** INVITED  
**CONGRESS:** 2010 TMS Annual Meeting & Exhibition  
**PUBLICATION:**  
**MEETING PLACE:** Seattle, USA  
**YEAR:** 2010

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**75- AUTHORS:** J. Nogués, A. López-Ortega, M. Estrader, D. Tobia, E. Winkler, S. Estradé, I. Golosovsky, J. Sort, G. Salazar-Alvarez, J. D. Ardisson, W. A. A. Macedo, K. L. Krycka, J. A. Borchers, J. Arbiol, F. Peiró, S. Suriñach, R.D. Zysler, M.D. Baró

**TITLE:** Exchange bias, size and proximity effects in inverted, antiferromagnetic (AFM)/ferrimagnetic (FiM), core/shell nanoparticles

**TYPE OF PRESENTATION:** INVITED

**CONGRESS:** 55<sup>th</sup> Annual conference on magnetism and magnetic materials (MMM2010)

**PUBLICATION:**

**MEETING PLACE:** Atlanta, USA

**YEAR:** 2010

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**76- AUTHORS:** J. Sort, J. Fornell, A. Varea, E. Rossinyol, L. F. Bonavina, C. Souza, W. J. Botta, C. Bolfarini, C. S. Kiminami, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Indentation-Induced Nanocrystallization of a Metallic Glass: Towards a Novel Route for Magnetic Patterning

**TYPE OF PRESENTATION:** INVITED

**CONGRESS:** ISMANAM 2010

**PUBLICATION:**

**MEETING PLACE:** Zürich, Suiza

**YEAR:** 2010

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**77- AUTHORS:** E. Pellicer, A. Varea, S. Pané, B. J. Nelson, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** Aleaciones de CuNi nanocristalinas con excelentes propiedades mecánicas y comportamiento magnético ajustable

**TYPE OF PRESENTATION:** INVITED

**CONGRESS:** Jornada sobre "Nanotecnología en biomateriales y recubrimientos". Organiza S.T. *Corrosió i Protecció*, UB. Colegio Oficial de Químicos de Cataluña

**PUBLICATION:**

**MEETING PLACE:** Barcelona

**YEAR:** 2010

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**78- AUTHORS:** J. Nogués, A. López-Ortega, D. Tobia, E. Winkler, S. Estradé, I. Golosovsky, M. Estrader, J. Sort, G. Salazar-Alvarez, J. Arbiol, F. Peiró, S. Suriñach, R. D. Zysler, M.D. Baró

**TITLE:** Size effects in surface passivated antiferromagnetic MnO nanoparticles: exchange bias, proximity effects, size dependent passivation layers, enhanced Neel temperature

**TYPE OF PRESENTATION:** INVITED

**CONGRESS:** 7<sup>th</sup> International Conference on Fine Particle Magnetism (ICFPM-2010)

**PUBLICATION:**

**MEETING PLACE:** Uppsala, Suecia

**YEAR:** 2010

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**79- AUTHORS:** J. Nogués, G. Salazar-Álvarez, J.J. Kavich, M. Tanase, A. Mugarza, S. Stepanow, A. Potenza, H. Marchetto, S.S. Dhesi, V. Baltz, A. Weber, L.J. Heyderman, A. K. Petford-Long, O. Heinonen, M.D. Baró, B. Dieny, K.S. Buchanan, A. Hoffmann, P. Gambardella, J. Sort

**TITLE:** Controlling magnetic vortices in circular dots using exchange bias

**TYPE OF PRESENTATION:** INVITED

**CONGRESS:** NordicSpin

**PUBLICATION:**

**MEETING PLACE:** Gimo Castle (Gimo Herrgård), Suecia  
**YEAR:** 2010

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**80- AUTHORS:** A. López-Ortega, M. Estarder, G. Salazar-Alvarez, J. Sort, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Exchange bias in inverted, antiferromagnetic (AFM)|Ferrimagnetic (FiM), core|shell nanoparticles  
**TYPE OF PRESENTATION:** INVITED  
**CONGRESS:** Collaborative Conference on Interacting Nanostructures  
**PUBLICATION:**  
**MEETING PLACE:** San Diego, USA  
**YEAR:** 2010

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**81- AUTHORS:** J. Sort  
**TITLE:** Mechanical properties of Ti-based glassy and nanocomposite alloys  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** 1st BioTiNet Workshop entitled "Advanced Methods for Materials Characterization"  
**PUBLICATION:**  
**MEETING PLACE:** Ljubljana, Slovenia  
**YEAR:** 2011

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**82- AUTHORS:** M. Estrader, A. López-Ortega, T. D. Winkler, S. Estradé, I. Golosovski, J. Sort, G. Salazar-Álvarez, P. Peiró, S. Suriñach, R. D. Zysler, M. D. Baró, J. Nogués  
**TITLE:** Exchange coupling in inverted antiferromagnetic/ferrimagnetic core/shell nanoparticles  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures (ACSIN-11)  
**PUBLICATION:**  
**MEETING PLACE:** St. Petersburg, Rússia  
**YEAR:** 2011

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**83- AUTHORS:** E. Pellicer, A. López-Ortega, M. Cabo, M. Estrader, J. Sort, Ll. Yedra, S. Estradé, S. Suriñach, Z. Saghí, P.A. Midgley, F. Peiró, M.D. Baró, J. Nogués  
**TITLE:** Ferrimagnetic  $\text{Fe}_x\text{Co}_{(2-x)}\text{O}_4$  nanostructures embedded in highly ordered antiferromagnetic  $\text{Co}_3\text{O}_4$  mesoporous templates  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** European Materials Research Society Fall Meeting (E-MRS 2011)  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw, Polònia  
**YEAR:** 2011

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**84- AUTHORS:** J. Sort, A.Varea, L. F. Bonavina, C. Souza, W. J. Botta, C. Bolfarini, C. S. Kiminami, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Magnetic Lithography based on Indentation-Induced Nanocrystallization of Metallic Glasses  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** 5th INTERNATIONAL WORKSHOP ON AMORPHOUS AND NANOSTRUCTURED MAGNETIC MATERIALS - ANMM'2011  
**PUBLICATION:**

**MEETING PLACE:** Iasi, Romania  
**YEAR:** 2011

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**85- AUTHORS:** J. Sort, J. Fornell, A. Varea, E. Rossinyol, L. F. Bonavina, C. Souza, W. J. Botta, C. Bolfarini, C. S. Kiminami, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Nanoindentation-induced crystallization of Zr-based and Fe-based metallic glasses  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** The 14th International Conference on Rapidly Quenched and Metastable Materials  
**PUBLICATION:**  
**MEETING PLACE:** Salvador de Bahia, Brasil  
**YEAR:** 2011

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**86- AUTHORS:** J. Nogués, A. López-Ortega, M. Estrader, D. Tobia, E. Winkler, S. Estradé, I. Golosovsky, J. Sort, G. Salazar-Alvarez, F. Peiró, S. Suriñach, R.D. Zysler, M.D. Baró  
**TITLE:** Novel structural and magnetic effects in passivated antiferromagnetic transition metal monoxides: inverted antiferromagnetic/ferrimagnetic, core/shell nanoparticles  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** The 19th Annual International Conference on Composites/Nano-engineering  
**PUBLICATION:**  
**MEETING PLACE:** Shanghai, Xina  
**YEAR:** 2011

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**87- AUTHORS:** A. Varea, E. Pellicer, K.M. Sivareman, S. Pané, B.J. Nelson, S. Suriñach, M.D. Baró, J. Nogués, J. Sort  
**TITLE:** Advanced magnetic lithography methods based on nanoindentation and ion irradiation  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** BNC-b Research Meeting  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2011

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**88- AUTHORS:** E. Pellicer, M. Estrader, M. Cabo, A. López-Ortega, J. Sort, E. Rossinyol, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Ordered mesoporous magnetic materials  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Collaborative Conference on 3D & Materials Research (3DMR)  
**PUBLICATION:**  
**MEETING PLACE:** Jeju, South Korea  
**YEAR:** 2011

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**89- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, D. Tobia, E. Winkler, R.K. Dumas, I.V. Golosovsky, J. Sort, F. Peiró, S. Suriñach, R.D. Zysler, M.D. Baró, J. Nogués  
**TITLE:** Enhanced Magnetic Properties in Bi-Magnetic Core|Shell Nanoparticles  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** ISMANAM 2011  
**PUBLICATION:**  
**MEETING PLACE:** Gijón, Spain

**YEAR:** 2011

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**90- AUTHORS:** J. Nogués, G. Salazar-Álvarez, J.J. Kavich, M. Tanase, A. Mugarza, S. Stepanow, V. Baltz, A. Weber, L.J. Heyderman, A.K. Petford-Long, O. Heinonen, M.D. Baró, B. Dieny, K.S. Buchanan, A. Hoffmann, P. Gambardella, J. Sort

**TITLE:** Controlling Magnetic Vortices Using Exchange Bias

**TYPE OF PRESENTATION:** invited

**CONGRESS:** Spin Waves 2011 conference

**PUBLICATION:**

**MEETING PLACE:** St. Petersburg, Russia

**YEAR:** 2011

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**91- AUTHORS:** M. Estrader, A. López-Ortega, G. Salazar-Alvarez, S. Estradé, J. Sort, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués

**TITLE:** Bi-magnetic Core|Shell nanoparticles

**TYPE OF PRESENTATION:** invited

**CONGRESS:** Villa Conference on Interactions Among Nanostructures, VCIAN 2011

**PUBLICATION:**

**MEETING PLACE:** Las Vegas, USA

**YEAR:** 2011

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**92- AUTHORS:** J. Sort, J. Fornell, A. Varea, E. Rossinyol, L.z Fernando Bonavina, C. Souza, W. J. Botta, C. Bolfarini, C. S. Kiminami, S. Suriñach, J. Nogués, M. D. Baró

**TITLE:** Selective nanocrystallization of metallic glasses induced by nanoindentation

**TYPE OF PRESENTATION:** invited

**CONGRESS:** TMS 2011

**PUBLICATION:**

**MEETING PLACE:** San Diego, California, USA

**YEAR:** 2011

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**93- AUTHORS:** J. Sort, A. Varea, E. Menéndez, S. Suriñach, A. Concustell, M.D. Baró, E. Pellicer, J. F. López-Barberá, J. Montserrat, E. Lora-Tamayo, J. Nogués

**TITLE:** Magnetic Lithography based on nanoindentation and ion irradiation

**TYPE OF PRESENTATION:** invited

**CONGRESS:** Asamblea Nacional del Club Español de Magnetismo

**PUBLICATION:**

**MEETING PLACE:** Barcelona

**YEAR:** 2012

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**94- AUTHORS:** J. Fornell, S. González, E. Rossinyol, E. Pellicer, S. Suriñach, D. Louzguine, A. Inoue, J. Sort, J. Nogués, M.D. Baró

**TITLE:** Evolution of the mechanical, magnetic and anticorrosion behavior of Fe-Co-B-Si-Nb bulk metallic glass during thermally-induced devitrification

**TYPE OF PRESENTATION:** invited

**CONGRESS:** TMS 2012

**PUBLICATION:**

**MEETING PLACE:** Orlando, USA

**YEAR:** 2012

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**95- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, I.V. Golosovsky, R.K. Dumas, D.J. Keavney, M. Vasilakaki, K. N. Trohidou, J. Sort, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués

**TITLE:** Heterostructured bi-magnetic soft-hard core-shell nanoparticles

**TYPE OF PRESENTATION:** invited

**CONGRESS:** JSAP-OSA Joint Symposia (73rd annual meeting)

**PUBLICATION:**

**MEETING PLACE:** Matsuyama (Japan)

**YEAR:** 2012

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**96- AUTHORS:** E. Pellicer, J. Sort

**TITLE:** Magnetic, thermal and mechanical properties of nanostructured materials

**TYPE OF PRESENTATION:** invited

**CONGRESS:** Workshop on "Magnetic Actuators for Quantitative analyses"

**PUBLICATION:**

**MEETING PLACE:** Zürich (Switzerland)

**YEAR:** 2012

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**97- AUTHORS:** E. Pellicer, S. Pané, A. Varea, K. M. Sivaraman, S. Fusco, S. Suriñach, M. D. Baró, J. Nogués, B. J. Nelson, J. Sort

**TITLE:** Cu-Ni electrodeposition: thin films, microcolumns and nanopillars

**TYPE OF PRESENTATION:** invited

**CONGRESS:** Workshop: "Surface modification by electrochemical methods: Synthesis and applications of novel nanomaterials"

**PUBLICATION:**

**MEETING PLACE:** Leuven (Belgium)

**YEAR:** 2012

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**98- AUTHORS:** E. Pellicer, S. Pané, K. M. Sivaraman, S. Schuerle, M. A. Zeeshan, S. Suriñach, N. Tintaru, H. Cesiulis, M. D. Baró, J. Nogués, B. J. Nelson, J. Sort

**TITLE:** Magnetic properties of electrodeposited alloys

**TYPE OF PRESENTATION:** invited

**CONGRESS:** Workshop: "Surface modification by electrochemical methods: Synthesis and applications of novel nanomaterials"

**PUBLICATION:**

**MEETING PLACE:** Leuven (Belgium)

**YEAR:** 2012

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**99- AUTHORS:** J. Nogués, I.V. Golosovsky, G. Salazar-Alvarez, A. López-Ortega, M.A. González, J. Sort, M. Estrader, S. Suriñach, M.D. Baró

**TITLE:** Magnetic proximity effect in antiferromagnetic/ferrimagnetic core/shell nanoparticles

**TYPE OF PRESENTATION:** invited

**CONGRESS:** VI REUNIÓN de la SOCIEDAD ESPAÑOLA de TÉCNICAS NEUTRÓNICAS (SETN)

**PUBLICATION:**

**MEETING PLACE:** Segovia (Spain)

**YEAR:** 2012

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**100- AUTHORS:** A. Varea, E. Pellicer, S. Pané, B. J. Nelson, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** Electrodeposition of Cu, Ni and CuNi nanopillars  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** ISMANAM 2012  
**PUBLICATION:**  
**MEETING PLACE:** Moscow (Russia)  
**YEAR:** 2012

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**101- AUTHORS:** E. Pellicer, M. Cabo, A. López-Ortega, M. Estrader, E. Rossinyol, J. Sort, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Ordered mesoporous metal oxides nanocomposites for multifunctional applications  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** ISMANAM 2012  
**PUBLICATION:**  
**MEETING PLACE:** Moscow (Russia)  
**YEAR:** 2012

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**102- AUTHORS:** E. Pellicer, A. López-Ortega, M. Cabo, M. Estrader, E. Rossinyol, J. Sort, L. Yedra, S. Estradé, I. Golosovsky, Z. Saghi, P. A. Midgley, J. D. Prades, A. Suriñach, F. Peiró, M. D. Baró, J. Nogués  
**TITLE:** Ordered exchange coupled ferrimagnetic-antiferromagnetic mesoporous magnetic materials  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** International Workshop on Nanostructured ceramics and other Nanomaterials (ICWNCN)  
**PUBLICATION:**  
**MEETING PLACE:** Delhi (India)  
**YEAR:** 2012

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**103- AUTHORS:** E. Pellicer, A. López-Ortega, M. Cabo, M. Estrader, E. Rossinyol, J. Sort, L. Yedra, S. Estradé, I. Golosovsky, Z. Saghi, P.A. Midgley, J. D. Prades, S. Suriñach, F. Peiró, M.D. Baró, J. Nogués  
**TITLE:** Tuneable magnetic properties in ordered mesoporous magnetic materials  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Third Nordic Workshop on Spintronics and Nanomagnetism  
**PUBLICATION:**  
**MEETING PLACE:** Varberg (Sweden)  
**YEAR:** 2012

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**104- AUTHORS:** E. Pellicer, A. López-Ortega, M. Cabo, M. Estrader, E. Rossinyol, J. Sort, L. Yedra, S. Estradé, I. Golosovsky, Z. Saghi, P. A. Midgley, J. D. Prades, S. Suriñach, F. Peiró, M. D. Baró, J. Nogués  
**TITLE:** Tunable magnetic properties in ordered mesoporous magnetic materials  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** MRS Spring Meeting  
**PUBLICATION:**  
**MEETING PLACE:** San Francisco (USA)  
**YEAR:** 2012

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**105- AUTHORS:** E. Pellicer, A. López-Ortega, M. Cabo, M. Estrader, E. Rossinyol, J. Sort, L. Yedra, S. Estradé, I. Golosovsky, Z. Saghi, P. A. Midgley, J. D. Prades, S. Suriñach, F. Peiró, M. D. Baró, J. Nogués

**TITLE:** Tunable magnetic properties in ordered mesoporous magnetic materials

**TYPE OF PRESENTATION:** invited

**CONGRESS:** SUDOE Workshop on Nanomagnetism and Spintronics

**PUBLICATION:**

**MEETING PLACE:** San Sebastian (Spain)

**YEAR:** 2012

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**106- AUTHORS:** E. Pellicer, M. Cabo, A. López-Ortega, M. Estrader, E. Rossinyol, J. Sort, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Functional mesoporous nanocast hybrid materials

**TYPE OF PRESENTATION:** invited

**CONGRESS:** VII Reunión Grupo Especializado de Estado Sólido

**PUBLICATION:**

**MEETING PLACE:** Sevilla (Spain)

**YEAR:** 2012

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**107- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Álvarez, S. Estradé, D. Tobia, E. Winkler, I.V. Golosovsky, J. Sort, F. Peiró, S. Suriñach, R. D. Zysler, M. D. Baró, J. Nogués

**TITLE:** Large exchange bias in inverted antiferromagnetic-ferrimagnetic core-shell nanoparticles

**TYPE OF PRESENTATION:** invited

**CONGRESS:** International Conference on Research in Condensed Matter Physics– 2012

**PUBLICATION:**

**MEETING PLACE:** Chennai (India)

**YEAR:** 2012

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**108- AUTHORS:** J. Sort

**TITLE:** Engineered materials for innovative applications in nanomechanics and magnetically-actuated micro-/nano-systems

**TYPE OF PRESENTATION:** invited

**CONGRESS:** BCN-b Nanocluster Workshop

**PUBLICATION:**

**MEETING PLACE:** Barcelona (Spain)

**YEAR:** 2012

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**109- AUTHORS:** E. Pellicer, S. González, A. Blanquer, S. Suriñach, M.D. Baró, L. Barrios, E. Ibáñez, C. Nogués, J. Sort

**TITLE:** Time-dependent mechanical behavior, biodegradability, and cytocompatibility of amorphous  $Mg_{72}Zn_{23}Ca_5$  and crystalline  $Mg_{70}Zn_{23}Ca_5Pd_2$  materials

**TYPE OF PRESENTATION:** invited

**CONGRESS:** TMS 2013

**PUBLICATION:**

**MEETING PLACE:** Texas (USA)

**YEAR:** 2013

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**110- AUTHORS:** J. Sort, M. Guerrero, E. Menéndez, , J. Fornell, E. Rossinyol, M. Roldan, O. Castell, S. Suriñach, M. D. Baró, A. Vantomme, K. Temst, J. Nogués, E. Pellicer

**TITLE:** Mesoporous semiconductor 3D ordered architectures prepared by nanocasting: (i) oxide diluted magnetic semiconductor and (ii) photoluminescent antidots

**TYPE OF PRESENTATION:** keynote

**CONGRESS:** ISMANAM 2013

**PUBLICATION:**

**MEETING PLACE:** Torino (Italy)

**YEAR:** 2013

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**111- AUTHORS:** E. Pellicer, S. Pané, M. Guerrero, J. Bumjin, M. A. Zeeshan, S. Suriñach, M. D. Baró, J. Nogués, B. J. Nelson, J. Sort

**TITLE:** Design and Synthesis of Multi-alloy/hybrid 1-D Nanoarchitectures for Magnetic and Biological Applications

**TYPE OF PRESENTATION:** invited

**CONGRESS:** ISMANAM 2013

**PUBLICATION:**

**MEETING PLACE:** Torino (Italy)

**YEAR:** 2013

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**112- AUTHORS:** E. Pellicer, M. A. Zeeshan, S. Pané, S. Suriñach, M. D. Baró, J. Nogués, B. J. Nelson, J. Sort

**TITLE:** Electrodeposited quaternary CoNiReP NWs with large hardness and tunable magnetic response

**TYPE OF PRESENTATION:** invited

**CONGRESS:** International Conference on Processing and Manufacturing of Advanced Materials (Thermec 2013)

**PUBLICATION:**

**MEETING PLACE:** Las Vegas (USA)

**YEAR:** 2013

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**113- AUTHORS:** J. Sort, A. Varea, S. Pané, K.M. Sivaraman, M. Guerrero, I. García-Urrutia, J.A. Díez, M.D. Baró, S. Suriñach, J. Nogués, E. García-Lecina, B.J. Nelson, E. Pellicer

**TITLE:** Nanocrystalline and nanocomposite Ni-rich electrodeposited films with enhanced functional properties

**TYPE OF PRESENTATION:** invited

**CONGRESS:** International Conference on Processing and Manufacturing of Advanced Materials (Thermec 2013)

**PUBLICATION:**

**MEETING PLACE:** Las Vegas (USA)

**YEAR:** 2013

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**114- AUTHORS:** M. Guerrero, M.D. Baró, S. Suriñach, M. Roldán, S. Pané, B.J. Nelson, E. García-Lecina, J. Sort, E. Pellicer

**TITLE:** Electrochemical Synthesis and Photoluminescent Properties of New 3D Hierarchically Porous BiOCl films

**TYPE OF PRESENTATION:** invited

**CONGRESS:** International Conference on Processing and Manufacturing of Advanced Materials (Thermec 2013)

**PUBLICATION:**

**MEETING PLACE:** Las Vegas (USA)

**YEAR:** 2013

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**115- AUTHORS:** S. González, E. Pellicer, A. Blanquer, S. Suriñach, M.D. Baró, L.I. Barrios, E. Ibáñez, C. Nogués, J. Sort  
**TITLE:** Biodegradability, mechanical behaviour and cytocompatibility of Mg<sub>72</sub>Zn<sub>23</sub>Ca<sub>5</sub> and Mg<sub>70</sub>Zn<sub>23</sub>Ca<sub>5</sub>Pd<sub>2</sub> alloys for implant applications  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** BIT's 1st Annual World Symposium of Innovative Materials for Therapy-2013  
**PUBLICATION:**  
**MEETING PLACE:** Haikou (Japan)  
**YEAR:** 2013

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**116- AUTHORS:** E. Pellicer, J. Sort  
**TITLE:** Fotoluminiscencia de luz blanca y fotoactivación en estructuras mesoporosas de SiO<sub>2</sub>@CdS: un nuevo material para iluminación de estado sólido  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Jornada de Materiales  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona (Spain)  
**YEAR:** 2013

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**117- AUTHORS:** J. Sort  
**TITLE:** Insights on the nanoindentation behavior of nanocrystalline and amorphous alloys  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Invited Seminar at EMPA  
**PUBLICATION:**  
**MEETING PLACE:** Thun (Switzerland)  
**YEAR:** 2013

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**118- AUTHORS:** J. Fornell, E. Pellicer, D. Nieto, E. García-Lecina, A. Concustell, S. Suriñach, A. L. Greer, M. D. Baró, J. Sort  
**TITLE:** Structural and mechanical modifications induced on Cu<sub>47.5</sub>Zr<sub>47.5</sub>Al<sub>5</sub> metallic glass by shot peening and surface laser treatments  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** TMS 2014 (143rd Annual Meeting)  
**PUBLICATION:**  
**MEETING PLACE:** San Diego (United States)  
**YEAR:** 2014

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**119- AUTHORS:** E. Pellicer, J. Sort  
**TITLE:** Functional porous metal oxides by nanocasting - applications in gas-sensing, magnetism and spintronics  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Deutsche Zeolith-Tagung  
**PUBLICATION:**  
**MEETING PLACE:** Paderborn (Germany)  
**YEAR:** 2014

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**120- AUTHORS:** B. Özkale, E. Pellicer, G. Chatzipirpiridis, J. Sort, B.J. Nelson, S. Pané  
**TITLE:** Fabrication of segmented FeCo/Cu nanowires by pulse electroplating  
**TYPE OF PRESENTATION:** invited

**CONGRESS:** 6th European Pulse Plating Seminar  
**PUBLICATION:**  
**MEETING PLACE:** Neustadt, Austria  
**YEAR:** 2014

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**121- AUTHORS:** B. Özkale, E. Pellicer, M. A. Zeeshan, J. F. López-Barberá, J. Nogués, J. Sort, B. J. Nelson, S. Pané  
**TITLE:** One-pot synthesis of multilayer magnetic metallopolymer nanocomposite by pulsed electroplating  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** 6th European Pulse Plating Seminar  
**PUBLICATION:**  
**MEETING PLACE:** Neustadt, Austria  
**YEAR:** 2014

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**122- AUTHORS:** E. Pellicer, M. Guerrero, S. Pané, B. J. Nelson, S. Suriñach, M.D. Baró, J. Sort  
**TITLE:** Tailor-made hierarchically porous composite films by electrodeposition: Synthesis and applications  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Collaborative Conference on Materials Research (CCMR)  
**PUBLICATION:**  
**MEETING PLACE:** Seoul (South Korea)  
**YEAR:** 2014

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**123- AUTHORS:** J. Sort, E. Menéndez, M. Guerrero, J. Fornell, E. Rossinyol, M. Roldán, O. Castell, S. Suriñach, M. D. Baró, A. Vantomme, K. Temst, J. Nogués, E. Pellicer  
**TITLE:** Semiconductor 3D ordered mesoporous architectures prepared by nanocasting: (i) oxide diluted magnetic semiconductor and (ii) photoluminescent antidots. Prospects and New Challenges  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** Collaborative Conference on Materials Research (CCMR)  
**PUBLICATION:**  
**MEETING PLACE:** Seoul (South Korea)  
**YEAR:** 2014

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**124- AUTHORS:** S. Pané, M.A. Zeeshan, B. Özkale, G. Chatzipirpiridis, S. Fusco, J. Pokki, A.M. Lindo, B. Jang, S. Schürle, O. Ergeneman, E. Pellicer, J. Sort, B. J. Nelson  
**TITLE:** Electrochemical Processing Technologies for Manufacturing Components in Micro- and Nanorobotic Platforms  
**TYPE OF PRESENTATION:** invited  
**CONGRESS:** INTERNATIONAL WORKSHOP ON MICRO- AND NANOMACHINES  
**PUBLICATION:**  
**MEETING PLACE:** Hannover (Germany)  
**YEAR:** 2014

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**125- AUTHORS:** D. Esqué-de los Ojos, R. Domingo-Roca, J. Zhang, M. Guerrero, E. Pellicer, M.D. Baró, S. Suriñach, J. Sort  
**TITLE:** Berkovich indentation finite element simulations on porous metal/metal oxide composite films and hierarchically porous metallic materials

**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** FIMPART 2015  
**PUBLICATION:**  
**MEETING PLACE:** Hyderabad (India)  
**YEAR:** 2015

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**126- AUTHORS:** D. Esqué-de los Ojos, M.A. Zeeshan, P. Castro-Hartmann, M. Guerrero, S. Suriñach, M.D. Baró, B.J. Nelson, J. Nogues, S. Pané, E. Pellicer, J. Sort  
**TITLE:** Nanomechanical behavior of amorphous and crystalline CoNiReP electrodeposited nanowires: a comparison with thick films with analogous compositions  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** FIMPART 2015  
**PUBLICATION:**  
**MEETING PLACE:** Hyderabad (India)  
**YEAR:** 2015

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**127- AUTHORS:** M. Guerrero, S. Pané, M.D. Baró, S. Suriñach, M. Roldan, J. Sort, E. Pellicer  
**TITLE:** 3D hierarchically porous Cu–BiOCl nanocomposite films: electrochemical synthesis, structural characterization and physical properties  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** FIMPART 2015  
**PUBLICATION:**  
**MEETING PLACE:** Hyderabad (India)  
**YEAR:** 2015

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**128- AUTHORS:** I. Golvano-Escobal, S. Suriñach, M.D. Baró, J. Sort, E. Pellicer  
**TITLE:** Synthesis, electrocatalytic and other physic-chemical properties of electrodeposited rhodium-iron: nanoparticles versus porous films  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 2015 Collaborative Conference on 3D Materials Research (CC3DMR)  
**PUBLICATION:**  
**MEETING PLACE:** Busan (South Korea)  
**YEAR:** 2015

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**129- AUTHORS:** M.A. Zeeshan, D. Esqué-de los Ojos, P. Castro-Hartmann, M. Guerrero, J. Nogues, S. Suriñach, M.D. Baró, B.J. Nelson, S. Pané, E. Pellicer, J. Sort  
**TITLE:** Comparative study of the nanomechanical properties of amorphous and crystalline nanowires with respect to thick films with analogous microstructure  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 2015 Collaborative Conference on 3D Materials Research (CC3DMR)  
**PUBLICATION:**  
**MEETING PLACE:** Busan (South Korea)  
**YEAR:** 2015

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**130- AUTHORS:** D. Esqué-de los Ojos, R. Domingo-Roca, J. Zhang, M. Guerrero, E. Pellicer, M.D. Baró, S. Suriñach, J. Sort  
**TITLE:** Mechanical properties of microporous and nanoporous alloys: experimental and theoretical (finite element modeling) points of view  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 2015 Collaborative Conference on 3D Materials Research (CC3DMR)

**PUBLICATION:**  
**MEETING PLACE:** Busan (South Korea)  
**YEAR:** 2015

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**131- AUTHORS:** J. Zhang, S. Agramunt, S. Pané, S. Estradé, F. Peiró, N. del Valle, M.D. Baró, C. Navau, A. Sánchez, J. Nogués, E. Pellicer, [J. Sort](#)  
**TITLE:** Template-assisted electrodeposition and magnetic properties of multi-segmented hard ferromagnetic (FM)/spacer/soft FM PtCo/Cu/Ni nanowires  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 2015 Collaborative Conference on 3D Materials Research (CC3DMR)  
**PUBLICATION:**  
**MEETING PLACE:** Busan (South Korea)  
**YEAR:** 2015

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**132- AUTHORS:** G. Mulas, S. Garroni, E. Masolo, S. Enzo, F. Spanu, E. Tolu, M. D. Baró, E. Pellicer, [J. Sort](#)  
**TITLE:** Mesoporous scaffolds and nanoconfined systems as advanced materials for energy storage and conversion  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ISMANAM 2015  
**PUBLICATION:**  
**MEETING PLACE:** Paris (France)  
**YEAR:** 2015

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**133- AUTHORS:** I. Golvano-Escobal, N. Domingo, J.C. González-Rosillo, T. Puig, S. Pané, X. Illa, S. Suriñach, M.D. Baró, J.F. López-Barberá, J. Nogués, E. Pellicer, [J. Sort](#)  
**TITLE:** Self-organized spatio-temporal electric, mechanical and magnetic micropatterning in electrodeposited cobalt-indium films and microcylinders  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ISMANAM 2015  
**PUBLICATION:**  
**MEETING PLACE:** Paris (France)  
**YEAR:** 2015

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**134- AUTHORS:** [J. Sort](#), S. Pané, D. Esqué-de los Ojos, M.A. Zeeshan, M. Guerrero, S. Suriñach, J. Nogués, M.D. Baró, B.J. Nelson, E. Pellicer  
**TITLE:** Structure, Mechanical and Magnetic Performance of Amorphous and Crystalline Electrodeposited CoNiReP Thin Films and Nanowires  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ISMANAM 2015  
**PUBLICATION:**  
**MEETING PLACE:** Paris (France)  
**YEAR:** 2015

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**135- AUTHORS:** [J. Sort](#), E. Menéndez, H.Y. Zhang, S. Suriñach, M.D. Baró, E. Pellicer, J. Nogués  
**TITLE:** Magnetic patterning strategies based on order-disorder transitions and nanocrystallization of metallic glasses  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** EMN Spain Meeting

**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2015

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**136- AUTHORS:** J. Sort  
**TITLE:** Nanoporous Materials: what can they bring to the fields of magnetism, solid state lighting or spintronics?  
**TYPE OF PRESENTATION:** Plenary  
**CONGRESS:** EUROMAT 2015  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw (Poland)  
**YEAR:** 2015

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**137- AUTHORS:** J.A. De Toro, D.P. Marques, P. Muñiz, V. Skumryev, J. Sort, D. Givord, J. Nogués  
**TITLE:** High temperature magnetic stabilization of cobalt nanoparticles by an antiferromagnetic proximity effect  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ANMM 2015  
**PUBLICATION:**  
**MEETING PLACE:** Iași (Rumania)  
**YEAR:** 2015

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**138- AUTHORS:** J. Sort  
**TITLE:** Advanced nanoporous materials for innovative applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Invited Seminar at ICMAB  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona (Spain)  
**YEAR:** 2015

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**139- AUTHORS:** H.Y. Zhang, Y.P. Feng, D. Nieto, E. García, M.D. Baró, E. Pellicer, J. Sort  
**TITLE:** Using femto-second pulsed laser irradiation to magnetically pattern the surface of non-ferromagnetic amorphous steel  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** TMS Annual Meeting & Exhibition 2016 – Bulk metallic glasses XIII session  
**PUBLICATION:**  
**MEETING PLACE:** Nashville, Tennessee (United States)  
**YEAR:** 2016

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**140- AUTHORS:** D. A. Gilbert, L. Ye, K. Liu, A. Verea, S. Agramunt-Puig, N. del Valle, C. Navau, A. Sánchez, J. F. Lopez-Barbera, K.S. Buchanan, A. Hoffmann, J. Sort, J. Nogués  
**TITLE:** Tilted vortex and mixed reversal modes in exchange-biased nano-dots and nano-ellipses  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** MMM-Intermag 2016  
**PUBLICATION:**  
**MEETING PLACE:** San Diego (United States)  
**YEAR:** 2016

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**141- AUTHORS:** J. Sort

**TITLE:** Nanomagnetism and spintronic devices

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Workshop on "Training on research methodologies, characterization techniques and reporting scientific results" / IFW Dresden

**PUBLICATION:**

**MEETING PLACE:** Dresden (Germany)

**YEAR:** 2016

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**142- AUTHORS:** H. Zhang, Y. Feng, D. Nieto, E. García-Lecina, C. Mcdaniel, J. Díaz-Marcos, M. T. Flores-Arias, G. M. O'connor, M. D. Baró, E. Pellicer, J. Sort

**TITLE:** Femto-second laser treatments performed at the surface of Fe-based metallic glasses

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** EMN 2D Materials

**PUBLICATION:**

**MEETING PLACE:** San Sebastian (Spain)

**YEAR:** 2016

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**143- AUTHORS:** J. Sort, I. García-Urrutia, E. García-Lecina, A. Varea, S. Pané, E. Pellicer

**TITLE:** Mechanical properties of electrodeposited nanocrystalline films and composite films containing fullerene-like WS<sub>2</sub> particles

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** EMN 2D Materials

**PUBLICATION:**

**MEETING PLACE:** San Sebastian (Spain)

**YEAR:** 2016

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**144- AUTHORS:** J. Fornell, Y.P. Feng, A. Blanquer, H.Y. Zhang, C. Nogués, E. Ibáñez, Ll. Barrios, P. Solsona, M.D. Baró, S. Suriñach, E. Pellicer, J. Sort

**TITLE:** Biodegradability, cytotoxicity, mechanical and magnetic properties of newly-developed Fe-Mn-Si-Pd alloys during in-vitro immersion tests in simulated body fluid

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** THERMEC 2016

**PUBLICATION:**

**MEETING PLACE:** Graz (Austria)

**YEAR:** 2016

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**145- AUTHORS:** J. Sort

**TITLE:** Nanoporous materials for magnetism and spintronics applications

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** The Gordon Seminars/ The armourers and brasiers' Cambridge forum

**PUBLICATION:**

**MEETING PLACE:** Cambridge (United Kingdom)

**YEAR:** 2016

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**146- AUTHORS:** M.D. Baró, H. Zhang, Y. Feng, D. Nieto, E. García-Lecina, C. McDaniel, J. Díaz-Marcos, M. T. Flores-Arias, G. M O'Connor, E. Pellicer, J. Sort

**TITLE:** Using Femtosecond Pulsed Laser Irradiation to Magnetically Pattern the Surface of Non-Ferromagnetic Amorphous Steel

**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ISMANAM 2016  
**PUBLICATION:**  
**MEETING PLACE:** Nara City (Japan)  
**YEAR:** 2016

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**147- AUTHORS:** K. Cordero, A. Abdollahi, I. Arias, J. Sort, G. Catalan  
**TITLE:** Switchable mechanical properties of ferroelectric domains  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 13th International Symposium on Ferroic Domains & Micro- to Nano-scopic Structures (ISFD-13)  
**PUBLICATION:** Vancouver (Canada)  
**MEETING PLACE:**  
**YEAR:** 2016

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**148- AUTHORS:** J. Sort, J. Zhang, S. Agramunt-Puig, N. Del-Valle, C. Navau, S. Estradé, F. Peiró, S. Pané, A. Sánchez, J. Nogués, E. Pellicer  
**TITLE:** Multi-Segmented Magnetic Nanowires as Advanced Nanorobotic Platforms for Biomedical Applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 61st Annual Conference on Magnetism and Magnetic Materials (2016 MMM)  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans (United States)  
**YEAR:** 2016

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**149- AUTHORS:** V. M. Villapún, H. Zhang, L. Cheung Chow, C. Howden, F. Esat, P. Pérez, G. Wells, J. Sort, S. Bull, J. Stach, S. González  
**TITLE:** Novel metallic glass composites with optimum antimicrobial and wear performance  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** World Summit on nanotechnology and nanomedicine research  
**PUBLICATION:**  
**MEETING PLACE:** Dubai (United Arab Emirates)  
**YEAR:** 2016

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**150- AUTHORS:** M. Guerrero, J. Fornell, J. Soriano, J. De Dios Sirvent, M. Cremades, E. Ibáñez, L. Barrio, M.D. Baró, S. Suriñach, C. Nogués, J. Sort, E. Pellicer  
**TITLE:** Novel FeMn(Si)-coated Polypropylene Membranes as Micro-robotic Magnetic Platforms for Drug Delivery Applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** BIT's 3rd Annual World Conference Congress of Smart Materials-2017  
**PUBLICATION:**  
**MEETING PLACE:** Bangkok, Thailand  
**YEAR:** 2017

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**151- AUTHORS:** M. Guerrero, J. Fornell, J. Soriano, J. De Dios Sirvent, M. Ferran-Marqués, E. Ibáñez, L. Barrios, M.D. Baró, S. Suriñach, C. Nogués, E. Pellicer, J. Sort  
**TITLE:** Design and characterization of novel FeMn-coated polypropylene nanodevices as micro-robotic magnetic platforms for drug delivery applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 4th World Congress and Expo on Nanotechnology and Materials Science

**PUBLICATION:**  
**MEETING PLACE:** Barcelona (Spain)  
**YEAR:** 2017

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**152- AUTHORS:** J. Sort, J. Zhang, S. Agramunt-Puig, N. Del-Valle, C. Navau, S. Estradé, F. Peiró, S. Pané, A. Sánchez, E. Pellicer, J. Nogués  
**TITLE:** Tri-segmented magnetic nanowires with antiparallel alignment: suitable platforms for biomedical applications with minimized agglomeration?  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** IEEE International Magnetism Conference, INTERMAG Europe 2017  
**PUBLICATION:**  
**MEETING PLACE:** Dublin (Ireland)  
**YEAR:** 2017

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**153- AUTHORS:** J. Fornell, E. Pellicer, J. Soriano, J. de Dios Sirvent, M. Guerrero, E. Ibáñez, L. Barrios, M.D. Baró, S. Suriñach, C. Nogués, J. Sort  
**TITLE:** Fabrication of magnetic FeMn(Si)-coated polypropylene membranes as micro-robotic platforms for drug delivery applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** FIMPART 2017  
**PUBLICATION:**  
**MEETING PLACE:** Bordeaux (France)  
**YEAR:** 2017

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**154- AUTHORS:** E. Menéndez, S. Suriñach, M. D. Baró, M. O. Liedke, J. Fassbender, J. Nogués, J. Sort  
**TITLE:** Structure, composition and magnetism in FeAl alloys  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** FIMPART 2017  
**PUBLICATION:**  
**MEETING PLACE:** Bordeaux (France)  
**YEAR:** 2017

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**155- AUTHORS:** J. Sort, Y. P. Feng, A. Blanquer, H. Y. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, N. Gaztelumendi, E. García-Lecina, L. Barrios, E. Pellicer, C. Nogués, J. Fornell  
**TITLE:** Novel Fe-Mn-Si-Pd dense and porous alloys: insights on mechanical, magnetic, corrosion and biocompatibility performance  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** FIMPART 2017  
**PUBLICATION:**  
**MEETING PLACE:** Bordeaux (France)  
**YEAR:** 2017

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**156- AUTHORS:** I. Golvano-Escobal, J. C. Gonzalez-Rosillo, N. Domingo, X. Illa, J. F. López-Barbera, J. Fornell, P. Solsona, L. Aballe, M. Foerster, S. Suriñach, M. D. Baró, T. Puig, S. Pané, J. Nogués, E. Pellicer, J. Sort  
**TITLE:** Spatio-temporal patterns formation in Cobalt-Indium system: continuous films vs. versus microdisk arrays  
**TYPE OF PRESENTATION:** Invited

**CONGRESS:** FIMPART 2017  
**PUBLICATION:**  
**MEETING PLACE:** Bordeaux (France)  
**YEAR:** 2017

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**157- AUTHORS:** S. Robbennolt, J. Fornell, A. Quintana, E. Menéndez, H. Zhang, V. Sireus, A. Gordó, E. Pellicer, J. Sort  
**TITLE:** Structural and Magnetic Properties of Fe-based, Nanoporous Thin Films  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** European Advanced Materials Congress (EAMC 2017)  
**PUBLICATION:**  
**MEETING PLACE:** Stockholm (Sweden)  
**YEAR:** 2017

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**158- AUTHORS:** M. D. Baró, J. Fornell, Y.P. Feng, A. Blanquer, H.Y. Zhang, C. Nogués, E. Ibáñez, L.I. Barrios, P. Solsona, S. Suriñach, E. Pellicer, J. Sort  
**TITLE:** Hydroxyapatite-coated and non-coated novel Fe-Mn-Si-Pd biocompatible alloys, designed for biomedical applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 16th International Conference on Rapidly Quenched and Metastable Materials  
**PUBLICATION:**  
**MEETING PLACE:** Leoben (Austria)  
**YEAR:** 2017

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**159- AUTHORS:** Z. Li, A. Aranda-Ramos, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, S. Lope Piedrafita, F. Pi, M. D. Baró, J. Sort, C. Nogués, J. Nogues, B. Sepulveda  
**TITLE:** Multifunctional magneto-plasmonic nanodomes for combined magnetic manipulation, multi-modal imaging and photo-thermal therapies  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** International union of materials research society-International conference of advanced materials (IUMRS-ICAM) 2017  
**PUBLICATION:**  
**MEETING PLACE:** Kyoto (Japan)  
**YEAR:** 2017

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**160- AUTHORS:** Z. Li, A. Aranda-Ramos, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, S. Lope Piedrafita, F. Pi, M. D. Baró, J. Sort, C. Nogués, J. Nogues, B. Sepulveda  
**TITLE:** Multifunctional magneto-plasmonic nanodomes for combined magnetic manipulation, multi-modal imaging and photo-thermal therapies  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Collaborative Conference on Materials Research (CCMR) 2017  
**PUBLICATION:**  
**MEETING PLACE:** Jeju Island (South Korea)  
**YEAR:** 2017

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**161- AUTHORS:** Z. Li, A. Aranda-Ramos, P. Guell-Grau, J.L. Tajada, L. Pou-Macayo, S. Lope-Piedrafita, F. Pi, M.D. Baro, J. Sort, C. Nogués, J. Nogués, B. Sepulveda  
**TITLE:** Combined photo-thermal therapy and multimodal imaging with magneto-plasmonic nanodomes  
**TYPE OF PRESENTATION:** Invited

**CONGRESS:** International Conference on Small Science and Energy Materials Nanotechnology Nanoparticles Meeting

**PUBLICATION:**

**MEETING PLACE:** San Sebastian (Spain)

**YEAR:** 2017

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**162- AUTHORS:** J. Fornell, Y. Feng, E. Pellicer, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Hydroxyapatite and ZnO coatings on Fe and FeMnSiPd alloys

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** International Conference on PROCESSING & MANUFACTURING OF ADVANCED MATERIALS (Thermec 2018)

**PUBLICATION:**

**MEETING PLACE:** Paris (France)

**YEAR:** 2018

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**163- AUTHORS:** J. Sort, A. Quintana, C. Navarro-Senent, E. Dislaki, S. Robbennolt, J. Fornell, E. Isarain-Chávez, E. Menéndez, M. D. Baró, J. Nogués, E. Pellicer

**TITLE:** Large magnetoelectric effects in nanoporous electrodeposited films and patterned structures

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** International Conference on PROCESSING & MANUFACTURING OF ADVANCED MATERIALS (Thermec 2018)

**PUBLICATION:**

**MEETING PLACE:** Paris (France)

**YEAR:** 2018

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**164- AUTHORS:** H. Zhang, Y. Feng, D. Nieto, E. García-Lecina, M.D. Baró, E. Pellicer, J. Sort

**TITLE:** Using Femtosecond Pulsed Laser Irradiation to Magnetically Pattern the Surface of Non-Ferromagnetic Amorphous Steel

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** International Conference on PROCESSING & MANUFACTURING OF ADVANCED MATERIALS (Thermec 2018)

**PUBLICATION:**

**MEETING PLACE:** Paris (France)

**YEAR:** 2018

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**165- AUTHORS:** S. Robbennolt, J. Fornell, A. Quintana, H. Zhang, E. Menéndez, E. Pellicer, J. Sort

**TITLE:** Magnetic and magnetoelectric properties of Fe-Cu thin films made nanoporous by electrochemical dealloying

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Collaborative conference on Materials Research (CCMR) 2018

**PUBLICATION:**

**MEETING PLACE:** Seoul (South Korea)

**YEAR:** 2018

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**166- AUTHORS:** J. Nogués, Z. Li, A. Aranda-Ramos, A. López-Ortega, P. Güell-Grau, J. L. Tajada, P. Pou-Moyano, F. Pi, S- Lope Piedrafita, M. D. Baró, J. Sort, P. Vavasori, C. Nogués, B. Sepúlveda

**TITLE:** Simultaneous local nanoheating/thermometry based on plasmonic magnetochromic nanodomes

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Collaborative conference on Materials Research (CCMR) 2018

**PUBLICATION:**

**MEETING PLACE:** Seoul (South Korea)

**YEAR:** 2018

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**167- AUTHORS:** E. Pellicer, E. Isarain-Chavez, M. D. Baró, J. Sort

**TITLE:** Magnetic properties of electrocatalytically active 3D nanoporous Fe-containing metallic films prepared by micelle-assisted electrodeposition

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** CIMTEC 2018, 8<sup>th</sup> Forum on New Materials

**PUBLICATION:**

**MEETING PLACE:** Perugia (Italy)

**YEAR:** 2018

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**168- AUTHORS:** J. Sort, A. Quintana, C. Navarro-Senent, J. Fornell, J. Zhang, E. Isarain-Chávez, E. Menéndez, R. Cuadrado, R. Robles, M. D. Baró, M. Guerrero, S. Pané, B. Nelson, C. Müller, P. Ordejón, J. Nogués, E. Pellicer

**TITLE:** Voltage-induced coercivity reduction in nanoporous alloy films and patterned structures: a boost towards energy-efficient magnetic actuation

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 2<sup>nd</sup> IEEE Conference on Advances in Magnetics

**PUBLICATION:**

**MEETING PLACE:** La Thuile (Italy)

**YEAR:** 2018

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**169- AUTHORS:** E. Pellicer, J. Zhang, J. Nogués, J. Sort

**TITLE:** Electrodeposition of tri-segmented magnetic nanowires with antiparallel alignment and zero net magnetization

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 2<sup>nd</sup> IEEE Conference on Advances in Magnetics

**PUBLICATION:**

**MEETING PLACE:** La Thuile (Italy)

**YEAR:** 2018

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**170- AUTHORS:** E. Dislaki, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Magneto-electric effects in electroplated hierarchically porous FeCu films patterned by colloidal lithography

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 2018 EMN Milan Meeting on Magnetic Nanomaterials

**PUBLICATION:**

**MEETING PLACE:** Milan (Italy)

**YEAR:** 2018

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**171- AUTHORS:** J. Sort, C. Navarro-Senent, A. Quintana, E. Menéndez, J. Fornell, J. Zhang, M.D. Baró, J. Nogués, E. Pellicer

**TITLE:** Magnetolectric effects in nanoporous alloys as a means to enhance energy efficiency in magnetically actuated devices

**TYPE OF PRESENTATION:** Plenary Talk

**CONGRESS:** 9th International Conference Materials Science and Condensed Matter Physics

**PUBLICATION:**

**MEETING PLACE:** Chisinau (Moldova)

**YEAR:** 2018

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**172- AUTHORS:** J. Sort, C. Navarro-Senent, J. Zhang, J. Fornell, E. Menéndez, J. Nogués, E. Pellicer

**TITLE:** Tri-segmented magnetic nanowires with antiparallel alignment: suitable platforms for biomedical

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** ISMANAM 2018

**PUBLICATION:**

**MEETING PLACE:** Rome (Italy)

**YEAR:** 2018

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**173- AUTHORS:** Z. Li, A. López-Ortega, A. Aranda-Ramos, J. L. Tajada, J. Sort, C. Nogués, P. Vavasori, J. Nogués, B. Sepúlveda

**TITLE:** Simultaneous local heating/thermometry based on plasmonic mag-netochromic nanodomes

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** ISMANAM 2018

**PUBLICATION:**

**MEETING PLACE:** Rome (Italy)

**YEAR:** 2018

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**174- AUTHORS:** J. Sort, A. Quintana, C. Navarro-Senent, E. Isaraín-Chávez, E. Menéndez, J. Fornell, M. D. Baró, J. Nogués, E. Pellicer

**TITLE:** Enhanced magnetoelectric effects in nanoporous alloy films and nanoporous metal/metal oxide lithographed microdisks prepared by electrodeposition

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** E-MRS 2018 Fall Meeting

**PUBLICATION:**

**MEETING PLACE:** Warsaw (Poland)

**YEAR:** 2018

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**175- AUTHORS:** H. Zhang, Y. Feng, D. Nieto, E. García-Lecina, M.D. Baró, E. Pellicer, J. Sort

**TITLE:** Using Femtosecond Pulsed Laser Irradiation (FSPLI) to Magnetically Pattern the Surface of Non-Ferromagnetic Amorphous Steel

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 4th Intl. Symp. on Science of Intelligent and Sustainable Advanced Materials (SISAM)

**PUBLICATION:**

**MEETING PLACE:** Rio de Janeiro (Brazil)

**YEAR:** 2018

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**176- AUTHORS:** J. Nogués, Z. Li, A. Aranda-Ramos, A. López-Ortega, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baró, J. Sort, P. Vavasori, C. Nogués, B. Sepúlveda

**TITLE:** Magnetoplasmonic Nanodomes as a Novel Structure for Biomedical Applications

**TYPE OF PRESENTATION:** Invited (Keynote)  
**CONGRESS:** IUMRS-ICEM 2018  
**PUBLICATION:**  
**MEETING PLACE:** Daejeon, Korea  
**YEAR:** 2018

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**177- AUTHORS:** M. O. Liedke, M. Butterling, A. Quintana, E. Menéndez, J. Ehrler, R. Bali, E. Hirschmann, V. Sireus, J. Nogués, J. Sort, A. Wagner  
**TITLE:** Vacancy mediated magnetic phase transitions  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 18th International Conference on Positron Annihilation  
**PUBLICATION:**  
**MEETING PLACE:** Orlando (USA)  
**YEAR:** 2019

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**178- AUTHORS:** A. Nicolenco, N. Tsyntaru, E. Pellicer, J. Sort, H. Cesiulis  
**TITLE:** Electrodeposited dense and porous Fe-based alloys: design and perspectives  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 4th e-MINDs COST Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Milan (Italy)  
**YEAR:** 2019

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**179- AUTHORS:** E. Rosolymu, E. Pellicer, J. Sort, E. A. Pavlatou  
**TITLE:** Morphological and structural characterization of tin/tin oxide nanowires  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 4th e-MINDs COST Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Milan (Italy)  
**YEAR:** 2019

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**180- AUTHORS:** M. Fernández-Barcia, B. Jang, C. Alcántara, M. Uhlemann, U. Wolff, A. Gebert, J. Sort, E. Pellicer, S. Pané  
**TITLE:** From layers to microstructures: exploiting confinement effects for the production of FeMn-based micromotors  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 4th e-MINDs COST Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Milan (Italy)  
**YEAR:** 2019

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**181- AUTHORS:** J. Sort, A. Quintana, C. Navarro-Senent, J. Fornell, E. Menéndez, M. D. Baró, E. Pellicer  
**TITLE:** Enhanced energy efficiency in voltage-actuated magnetic nanoporous alloy films and patterned structures  
**TYPE OF PRESENTATION:** Invited (Keynote)  
**CONGRESS:** IAPE '19  
**PUBLICATION:**  
**MEETING PLACE:** Oxford (UK)  
**YEAR:** 2019

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**182- AUTHORS:** J. Sort, C. Navarro-Senent, A. Quintana, J. Fornell, E. Menéndez, J. Nogués, E. Pellicer  
**TITLE:** Magneto-ionic effects in nanoporous lithographed structures: reducing energy consumption in magnetoelectronic devices  
**TYPE OF PRESENTATION:** Invited (Keynote)  
**CONGRESS:** ISMANAM 2019  
**PUBLICATION:**  
**MEETING PLACE:** Chennai (India)  
**YEAR:** 2019

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**183- AUTHORS:** J. Sort  
**TITLE:** How to modify the magnetic properties of materials with electrical voltage?  
**TYPE OF PRESENTATION:** Plenary Talk  
**CONGRESS:** Engineering, environment and materials in processing industry Congress 2019  
**PUBLICATION:**  
**MEETING PLACE:** Jahorina (Bosnia and Herzegovina)  
**YEAR:** 2019

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**184- AUTHORS:** J. Fornell, C. Navarro-Senent, S. Suriñach, M.D. Baró, E. Pellicer, J. Sort  
**TITLE:** Converse magnetoelectric effect in porous FeGa/ZnO thin films  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ISMANAM 2019  
**PUBLICATION:**  
**MEETING PLACE:** Chennai (India)  
**YEAR:** 2019

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**185- AUTHORS:** Z. Li, A. Aranda-Ramos, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, S. Lope Piedrafita, F. Pi, M.D. Baró, J. Sort, C. Nogués, J. Nogués, B. Sepulveda  
**TITLE:** Multifunctional magneto-plasmonic nanodomains for combined magnetic manipulation, multi-modal imaging and photo-thermal therapies  
**TYPE OF PRESENTATION:** Invited (Keynote)  
**CONGRESS:** ISMANAM 2019  
**PUBLICATION:**  
**MEETING PLACE:** Chennai (India)  
**YEAR:** 2019

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**186- AUTHORS:** C. Navarro, A. Quintana Puebla, S. Robbenolt, A. Nicolenco, D. Baró, V. Sireus, E. Pellicer, J. Nogués, E. Menéndez, J. Sort  
**TITLE:** Voltage-controlled on-off ferromagnetism in dense and nanoporous transition-metal oxides  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 64th Annual Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Las Vegas (USA)  
**YEAR:** 2019

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**187- AUTHORS:** J. Sort

**TITLE:** Voltage-modified magnetic surfaces: towards enhanced energy efficient magnetic actuation

**TYPE OF PRESENTATION:** Plenary Talk

**CONGRESS:** SMT33

**PUBLICATION:**

**MEETING PLACE:** Naples (Italy)

**YEAR:** 2019

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**188- AUTHORS:** J. Nogués, Z. Li, A. Aranda-Ramos, A. López-Ortega, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baró, J. Sort, P. Vavasori, C. Nogués, B. Sepúlveda

**TITLE:** Magnetoplasmonic Nanodomes as a Novel Structure for Biomedical Applications

**TYPE OF PRESENTATION:** Plenary Talk

**CONGRESS:** III International Baltic Conference on Magnetism 2019

**PUBLICATION:**

**MEETING PLACE:** Svetlogorsk (Russia)

**YEAR:** 2019

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**189- AUTHORS:** J. Sort

**TITLE:** Overview of the Research Activities at the Gnm3 Group

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Collaborative Info Day UPC-UAB

**PUBLICATION:**

**MEETING PLACE:** Barcelona (Spain)

**YEAR:** 2019

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**190- AUTHORS:** J. Nogués, Z. Li, A. Aranda-Ramos, A. López-Ortega, P. Güell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baró, J. Sort, P. Vavasori, C. Nogués, B. Sepúlveda

**TITLE:** Magnetoplasmonic Nanodomes as a Novel Structure for Biomedical Applications

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** JEMS 2019

**PUBLICATION:**

**MEETING PLACE:** Upsala (Sweden)

**YEAR:** 2019

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**191- AUTHORS:** J. Sort

**TITLE:** Magnetoelectric effects in mesoporous alloys: towards enhanced energy efficiency in magnetically-actuated devices

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Grenoble-Barcelona twin conference : From quantum systems to new materials and smart electrical energy

**PUBLICATION:**

**MEETING PLACE:** Grenoble (France)

**YEAR:** 2019

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**192- AUTHORS:** A. Nicolenco, C. Navarro-Senent, S. Robbenolt, A. Quintana, E. Dislaki, E. Pellicer, E. Menéndez, J. Sort

**TITLE:** Magnetoelectric effects in nanoporous alloys and semiconductors

**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Heraeus Seminars  
**PUBLICATION:**  
**MEETING PLACE:** Bad Honnef (Germany)  
**YEAR:** 2020

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**193- AUTHORS:** J. Sort  
**TITLE:** Large magnetoelectric effects in electrolyte-gated nanoporous metallic alloys and oxide materials  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Invited Talk at AALTO University  
**PUBLICATION:**  
**MEETING PLACE:** Aalto (Finland)  
**YEAR:** 2020

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**194- AUTHORS:** A. Nicolenco, E. Menéndez, J. Fornell, E. Pellicer, X.-Z. Chen, S. Pané, J. Sort  
**TITLE:** Strain gradient mediated magnetoelectric effects in composite polymer/inorganic multiferroic films  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** CIMTEC 2020 Congress  
**PUBLICATION:**  
**MEETING PLACE:** Montecatini (Italy)  
**YEAR:** 2020

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**195- AUTHORS:** J. Sort, J. de Rojas, A. Quintana, E. Menéndez  
**TITLE:** Boosting magneto-ionic effects in a non-magnetic oxide semiconductor  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** EMA 2021 / online  
**PUBLICATION:**  
**MEETING PLACE:**  
**YEAR:** 2021

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**196- AUTHORS:** J. de Rojas, E. Menéndez, J. Sort  
**TITLE:** Voltage control of magnetism with magneto-ionic approaches: beyond oxygen ion migration  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** PetaSpin Seminar  
**PUBLICATION:**  
**MEETING PLACE:** online (Italian IEEE Magnetics Society)  
**YEAR:** 2021

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**197- AUTHORS:** J. Sort  
**TITLE:** Magneto-ionics for energy efficiency: challenges and opportunities  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Clustering and Global Challenges” (CGC2021) international online conference  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**198- AUTHORS:** A. Bartkowska, P. Solsona, E. Pellicer, [J. Sort](#)  
**TITLE:** Engineered porous Fe<sub>50</sub>Mn<sub>50</sub> alloys with additions of Zn/Ag as antibacterial elements for biodegradable implant applications  
**TYPE OF PRESENTATION:** keynote  
**CONGRESS:** Euromat 2021  
**PUBLICATION:**  
**MEETING PLACE:** online (Graz)  
**YEAR:** 2021

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**199- AUTHORS:** J. de Rojas, E. Menéndez, [J. Sort](#)  
**TITLE:** Voltage-driven ion-migration in magnetic materials: a new approach to enhance energy efficiency  
**TYPE OF PRESENTATION:** Plenary Address  
**CONGRESS:** 13th International Conference on Physics of Advanced Materials, ICPAM-13  
**PUBLICATION:**  
**MEETING PLACE:** Sant Feliu de Guíxols (Spain)  
**YEAR:** 2021

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**200- AUTHORS:** [J. Sort](#)  
**TITLE:** Magneto-ionic ON-OFF switching of ferromagnetism: challenges and prospects  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 2<sup>nd</sup> Symposium Nanotechnologies for 21st century cooperation event between Albania, Japan and Spain  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**201- AUTHORS:** [J. Sort](#)  
**TITLE:** Voltage-control of magnetism: a new approach to enhance energy efficiency in information technologies  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Annual Congress of Nanoscience and Nanotechnology (III CANN-2021) / Barcelona  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**202- AUTHORS:** [J. Sort](#)  
**TITLE:** Overview of the BeMAGIC European Training Network  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Joint IOP / ITN MagnEFI Magnetism School / online  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**203- AUTHORS:** K. Eiler, [J. Sort](#), E. Pellicer  
**TITLE:** Nanostructuring electrocatalyst materials by electrodeposition  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** International Process Metallurgy Symposium (IPMS)

**PUBLICATION:**  
**MEETING PLACE:** Helsinki/Finland  
**YEAR:** 2021

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**204- AUTHORS:** Z. Tan, J. de Rojas, J. L. Costa-Kramer, A. Quintana, E. Menéndez, J. Sort  
**TITLE:** Magneto-Ionics Using Nitrogen Ion Transport—Towards Emulation of New Neuromorphic Functionalities  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 23rd International Conference on Solid State Ionics (SSI-23)  
**PUBLICATION:**  
**MEETING PLACE:** Boston/USA  
**YEAR:** 2022

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**205- AUTHORS:** Z. Tan, J. de Rojas, S. Martins, A. Nicolenco, J.L. Costa-Kramer, A. Quintana, E. Menéndez, J. Sort  
**TITLE:** Magneto-ionics in transition metal nitrides and its potential for artificial synapses  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** CIMTEC  
**PUBLICATION:**  
**MEETING PLACE:** Perugia, Italy  
**YEAR:** 2022

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**206- AUTHORS:** J. Sort  
**TITLE:** Advanced Magnetolectric Nanocomposites and Their Applications  
**TYPE OF PRESENTATION:** Invited/Chair  
**CONGRESS:** "Nanomaterials" Webinar (SciForum)  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2022

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**207- AUTHORS:** Z.Tan, J de Rojas, J. L. Costa-Krämer, A. Quintana, E. Menéndez, J. Sort  
**TITLE:** Voltage-driven ON-OFF switching of ferromagnetism in transition metal oxide and nitride films for neuromorphic applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** JEMS 2022  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw, Poland  
**YEAR:** 2022

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**208- AUTHORS:** J. Sort  
**TITLE:** Magneto-ionics in transition metal oxides and nitrides and its potential for neuromorphic computing  
**TYPE OF PRESENTATION:** Plenary  
**CONGRESS:** Seminar MR  
**PUBLICATION:**  
**MEETING PLACE:** online, Brazil  
**YEAR:** 2022

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**209- AUTHORS:** J. Nogués, A. Lafuente, Z. Li, A. Flucksman, A. Aranda-Ramos, A. Lopez-Ortega, A.G. Roca, P. Guell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baro, J. Sort, P. Vavassori, C. Nogues, O. Benny, B. Sepulveda

**TITLE:** Magnetoplasmonic nanodomains as a novel structure for biomedical Applications

**TYPE OF PRESENTATION:** Plenary

**CONGRESS:** Nanomaterial Applied to Life Sciences (NALS)

**PUBLICATION:**

**MEETING PLACE:** Santader, Spain

**YEAR:** 2022

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**210- AUTHORS:** J. Nogués, A. Lafuente, Z. Li, A. Flucksman, A. Aranda-Ramos, A. Lopez-Ortega, A.G. Roca, P. Guell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baro, J. Sort, P. Vavassori, C. Nogues, O. Benny, B. Sepulveda

**TITLE:** Magnetoplasmonic nanodomains as a novel structure for biomedical Applications

**TYPE OF PRESENTATION:** Plenary

**CONGRESS:** International Conference on Fine Particle Magnetism (ICFPM)

**PUBLICATION:**

**MEETING PLACE:** Yokohama, Japan

**YEAR:** 2022

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**211- AUTHORS:** J. Nogués, A. Lafuente, Z. Li, A. Flucksman, A. Aranda-Ramos, A. Lopez-Ortega, A.G. Roca, P. Guell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baro, J. Sort, P. Vavassori, C. Nogues, O. Benny, B. Sepulveda

**TITLE:** Magnetoplasmonic nanodomains as a novel structure for biomedical applications

**TYPE OF PRESENTATION:** Plenary

**CONGRESS:** Nano Science/Technology/Biotechnology (3NANO)

**PUBLICATION:**

**MEETING PLACE:** Rome, Italy

**YEAR:** 2022

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**212- AUTHORS:** K. Eiler, J. Sort, E. Pellicer

**TITLE:** Nanostructured Ni-based electrocatalysts for hydrogen energy

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 3D / ICOMAS

**PUBLICATION:**

**MEETING PLACE:** Verona, Italy

**YEAR:** 2022

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**213- AUTHORS:** N. Domingo, Ch. Stefani, I. Spasojevic, V. Sireus, E. Menendez, J. Sort, A. Verdager, G. Catalan

**TITLE:** Coupling of Ferroelectric Domain Walls with Liquid and Magnetic Interfaces

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** MRS Fall Meeting

**PUBLICATION:**

**MEETING PLACE:** Boston, USA

**YEAR:** 2022

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**214- AUTHORS:** J. Sort, Z. Tan, Z. Ma, P. Monalisha, J. de Rojas, J. L. Costa-Krämer, J. Nogués, A. Quintana, E. Pellicer, E. Menéndez

**TITLE:** Electrostatic charging and magneto-ionics: a new paradigm for low-power memory applications and neuromorphic systems

**TYPE OF PRESENTATION:** Plenary  
**CONGRESS:** AIM 23  
**PUBLICATION:**  
**MEETING PLACE:** Moena, Italy  
**YEAR:** 2023

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**215- AUTHORS:** [J. Sort](#)

**TITLE:** Recent progress in voltage control of magnetism using magneto-ionics and strain: fundamental aspects and prospective applications

**TYPE OF PRESENTATION:** Plenary

**CONGRESS:** Invited Seminar at IMDEA Materiales

**PUBLICATION:**

**MEETING PLACE:** Madrid, Spain

**YEAR:** 2023

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**216- AUTHORS:** [J. Sort](#)

**TITLE:** Electrolyte-gated magnetic materials: a new way to control magnetism with voltage for low-power memory systems

**TYPE OF PRESENTATION:** keynote

**CONGRESS:** CRC Colloquia, University of Darmstadt

**PUBLICATION:**

**MEETING PLACE:** online

**YEAR:** 2023

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**217- AUTHORS:** [J. Sort](#)

**TITLE:** Electrolyte gating of magnetic materials: a new paradigm for low-power memory applications and neuromorphic systems

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Invited seminar at INRIM

**PUBLICATION:**

**MEETING PLACE:** Torino, Italy

**YEAR:** 2023

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**218- AUTHORS:** [J. Sort](#)

**TITLE:** Magneto-ionics for neuromorphic computing

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** BeMAGIC Conference 2023: "Beyond Magnetoelectric Materials"

**PUBLICATION:**

**MEETING PLACE:** Torino, Italy

**YEAR:** 2023

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**219- AUTHORS:** J. Nogués, A. Lafuente, Z. Li, A. Flucksman, A. Aranda-Ramos, A. Lopez-Ortega, A.G. Roca, P. Guell-Grau, J.L. Tajada, L. Pou-Macayo, F. Pi, S. Lope Piedrafita, M.D. Baro, [J. Sort](#), P. Vavassori, C. Nogues, O. Benny, B. Sepulveda

**TITLE:** Magnetoplasmonic nanodomains as a novel structure for biomedical applications

**TYPE OF PRESENTATION:** Keynote

**CONGRESS:** RQ1-ISMANAM27

**PUBLICATION:**

**MEETING PLACE:** Warsaw, Poland

**YEAR:** 2023

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**220- AUTHORS:** J. Sort, Z. Tan, N. López, Z. Ma, P. Monalisha, J. de Rojas, J. L. Costa-Krämer, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez  
**TITLE:** Shaping the future: Energy-efficient magnetic memory and neuromorphic technologies  
**TYPE OF PRESENTATION:** Plenary  
**CONGRESS:** JEMS 2023  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2023

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**221- AUTHORS:** J. Sort, Z. Tan, N. López, Z. Ma, I. Spasojević, P. Monalisha, J. de Rojas, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez  
**TITLE:** Voltage-control of magnetism: fundamental mechanisms and prospective applications in low-power memory and artificial synapses  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Trends in Magnetism 2023  
**PUBLICATION:**  
**MEETING PLACE:** Rome, Italy  
**YEAR:** 2023

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**222- AUTHORS:** E. Pellicer, J. Sort  
**TITLE:** Mesoporous metallic materials electrodeposited from polymeric micelle assemblies for energy applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 244th ECS Meeting  
**PUBLICATION:**  
**MEETING PLACE:** Gothenburg, Sweden  
**YEAR:** 2023

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**223- AUTHORS:** Z. Tan, N. López, Z. Ma, I. Spasojević, P. Monalisha, J. de Rojas, J. L. Costa-Krämer, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez, J. Sort  
**TITLE:** Recent developments on nitrogen magneto-ionics  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** 4th Workshop - Cooperation event between Albania, Japan, and Spain  
**PUBLICATION:**  
**MEETING PLACE:** Tirana, Albania  
**YEAR:** 2023

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**224- AUTHORS:** Z. Tan, N. López, Z. Ma, I. Spasojević, P. Monalisha, J. de Rojas, J. L. Costa-Krämer, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez, J. Sort  
**TITLE:** Magneto-ionics for low-power memory and neuromorphic applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Nanobalkan 2023  
**PUBLICATION:**  
**MEETING PLACE:** Tirana, Albania  
**YEAR:** 2023

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**225- AUTHORS:** Z. Tan, Z. Ma, L. Fuentes-Rodriguez, M. O. Liedke, M. Butterling, A. G. Attallah, E. Hirschmann, A. Wagner, L. Abad, N. Casañ-Pastor, A. Lopeandia, E. Menéndez, J. Sort

**TITLE:** Solid/Liquid Electrolyte Engineering to Boost Cyclability During Magneto-ionic Actuation  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** MMM  
**PUBLICATION:**  
**MEETING PLACE:** Dallas, USA  
**YEAR:** 2023

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**226- AUTHORS:** E. Menéndez, [J. Sort](#)  
**TITLE:** Control of magnetism by voltage-driven ion transport (magneto-ionics)  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ELBE Scientific and Advisory Committee Meeting 2023  
**PUBLICATION:**  
**MEETING PLACE:** Rossendorf, Germany  
**YEAR:** 2023

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**227- AUTHORS:** [J. Sort](#)  
**TITLE:** Voltage control of magnetism for low-power memory and neuromorphic applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Invited seminar at ICN2  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2023

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**228- AUTHORS:** [J. Sort](#)  
**TITLE:** Enabling magneto-ionics for brain-inspired memory applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** BeMAGIC Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2023

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**229- AUTHORS:** [J. Sort](#)  
**TITLE:** Multi-layered  $[\text{Co/Ni}]_n/\text{Ru}/[\text{Co/Ni}]_m$  voltage-sensitive materials for MRAMS  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Nickeffect Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2024

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**230- AUTHORS:** N. López-Pintó, C. J. Jensen, Z. Chen, Z. Tan, M. O. Liedke, M. Butterling, A. Wagner, J. Herrero-Martín, E. Menéndez, J. Nogués, K. Liu, [J. Sort](#)  
**TITLE:** Solid-state magneto-ionic control of magnetization and exchange bias in CoMnN single-layer films  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ICM 2024  
**PUBLICATION:**  
**MEETING PLACE:** Bologne, Italy  
**YEAR:** 2024

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**231- AUTHORS:** J. Sort, N. López, A. Arredondo, Z. Tan, Z. Ma, I. Spasojević, M. Peda, J. de Rojas, C. J. Jensen, Z. Chen, A. Quintana, E. Pellicer, K. Liu, J. Nogués, E. Menéndez  
**TITLE:** Nitrogen magneto-ionics: recent progress and prospective applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** ICM 2024  
**PUBLICATION:**  
**MEETING PLACE:** Bologne, Italy  
**YEAR:** 2024

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**232- AUTHORS:** I. Fina, T. Song, H. Tan, T. Zakusylo, A. Quintana, N. Dix, P. Koutsogiannis, J. L. Ortola, J. Lyu, S. Estandía, C. Magén, J. A. Pardo, V. Lenzi, J. Silva, L. Marques, J. Sort, F. Sánchez  
**TITLE:** Epitaxial ferroelectric hafnia as a suitable platform for fundamental and novel phenomena investigations  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** CMD  
**PUBLICATION:**  
**MEETING PLACE:** Braga, Portugal  
**YEAR:** 2024

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**233- AUTHORS:** J. Sort  
**TITLE:** Nitrogen magneto-ionics: fundamentals and prospective applications  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** Invited seminar at CEITEC  
**PUBLICATION:**  
**MEETING PLACE:** Brno, Czech Republic  
**YEAR:** 2024

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**234- AUTHORS:** J. Sort, N. López, A. Arredondo, Z. Tan, Z. Ma, I. Spasojević, M. Peda, N. Casañ-Pastor, A. Quintana, E. Pellicer, C. J. Jensen, Z. Chen, F. Celegato, P. Tiberto, K. Liu, J. Nogués, E. Menéndez  
**TITLE:** Recent Progress in Nitrogen Magneto-ionics: New Materials and Phenomena for Brain-inspired Memory Devices  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** MMM-Intermag 2025  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans, USA  
**YEAR:** 2025

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**235- AUTHORS:** J. Nogués, A. Lafuente, A. Flucksman, A.G. Roca, J. Sort, C. Nogués, O. Benny, B. Sepulveda  
**TITLE:** Magnetoplasmonic Nanocapsules as Wirelessly Controlled Nanotherapies  
**TYPE OF PRESENTATION:** Invited  
**CONGRESS:** MMM-Intermag 2025  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans, USA  
**YEAR:** 2025

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**236- AUTHORS:** A. Barrera, E. Fourneau, T. Gunkel, N. Lejeune, S. Marinković, J. A. Arregi, M. Stano, N. Bort-Soldevila, J. Cunill-Subiranas, N. Del-Valle, N. Mestres, Ll. Balcells, A. Smekhova, S. Valencia, I. Spasojević, J. Sort, C. Navau, V. Uhlíř, S. Bending, A. V. Silhanek, A. Palau

**TITLE:** Manipulating Magnetic Nanostructures through Field-Induced Ionic Migration and Flower-like Magnetic Metasurfaces

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 10th International Conference on Magnetism and Superconductivity /

**PUBLICATION:**

**MEETING PLACE:** Mugla, Turkey

**YEAR:** 2025

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**237- AUTHORS:** I. Spasojević, Z. Ma, A. Barrera, F. Celegato, A. Magni, S. Ruiz-Gómez, M. Foerster, A. Palau, P. Tiberto, K. S. Buchanan, J. Sort

**TITLE:** Unraveling the Magneto-Ionic Vortex: Formation and Control

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** 10th International Conference on Magnetism and Superconductivity /

**PUBLICATION:**

**MEETING PLACE:** Mugla, Turkey

**YEAR:** 2025

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**238- AUTHORS:** J. Sort, N. López-Pintó, Z. Ma, I. Spasojević, Z. Tan, M. Peda, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez

**TITLE:** Magneto-ionic Phenomena for Low-power Memory and Prospective Synaptic Applications

**TYPE OF PRESENTATION:** Semi-plenary

**CONGRESS:** 10th International Conference on Magnetism and Superconductivity /

**PUBLICATION:**

**MEETING PLACE:** Mugla, Turkey

**YEAR:** 2025

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**239- AUTHORS:** J. Sort

**TITLE:** Magneto-Ionics for Energy-Efficient Brain-Inspired Memory Devices

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Nicheffect webinar

**PUBLICATION:**

**MEETING PLACE:** online

**YEAR:** 2025

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**240- AUTHORS:** J. Sort

**TITLE:** Nitrogen Magneto-ionics for Data Security and Low-power Computing

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** Invited seminar at TU Wien

**PUBLICATION:**

**MEETING PLACE:** Wien, Austria

**YEAR:** 2025

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**241- AUTHORS:** J. Sort, I. Spasojević, J. De Rojas, N. López-Pintó, Z. Ma, P. Monalisha, Z. Tan, L. Martínez-Armesto, H. Tan, A. Arredondo-López, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez

**TITLE:** Magneto-ionics for Low-power Memory, Data Security and Advanced Computing

**TYPE OF PRESENTATION:** Keynote

**CONGRESS:** Nanobalkan 2025

**PUBLICATION:**

**MEETING PLACE:** Tirana, Albania

YEAR: 2025

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**242- AUTHORS:** J. Sort

**TITLE:** Magneto-ionics for brain-inspired memory devices

**TYPE OF PRESENTATION:** Plenary

**CONGRESS:** Donostia is Science

**PUBLICATION:**

**MEETING PLACE:** Donostia, Spain

**YEAR:** 2025

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**243- AUTHORS:** I. Spasojević, Z. Ma, A. Barrera, F. Celegato, A. Magni, S. Ruiz Gómez, M. Foerster, A. Palau, P. Tiberto, K. Buchanan, J. Sort

**TITLE:** Magneto-Ionic Vortices: Paving the Way for Secure, Reconfigurable and Energy-Efficient Devices

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** MMM 2025

**PUBLICATION:**

**MEETING PLACE:** Palm Beach, USA

**YEAR:** 2025

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**244- AUTHORS:** J. Sort, I. Spasojevic, P. Monalisha, A. Quintana, H. Tan, Z. Ma, L. Martínez-Armesto, E. Menéndez

**TITLE:** Magneto-ionic materials for synaptic memory and advanced computing

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** MATSUS Spring 2026

**PUBLICATION:**

**MEETING PLACE:** Barcelona, Spain

**YEAR:** 2026

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**245- AUTHORS:** I. Spasojević, F. Celegato, A. Magni, A. Barrera, Z. Ma, S. Ruiz-Gómez, M. Foerster, A. Palau, K. S. Buchanan, P. Tiberto, J. Sort

**TITLE:** Magneto-ionic materials for synaptic memory and advanced computing

**TYPE OF PRESENTATION:** Invited

**CONGRESS:** ICSM 2026

**PUBLICATION:**

**MEETING PLACE:** Fethyie, Turkey

**YEAR:** 2026

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**246- AUTHORS:** J. Sort, N. López-Pintó, I. Spasojević, Z. Ma, Z. Tan, M. Peda, A. Quintana, E. Pellicer, J. Nogués, E. Menéndez

**TITLE:** Merging Voltage-Iontronics with Magnetism for Advanced Memory Applications

**TYPE OF PRESENTATION:** Keynote

**CONGRESS:** ICSM 2026

**PUBLICATION:**

**MEETING PLACE:** Fethyie, Turkey

**YEAR:** 2026

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## Oral/Poster Presentations in Conferences

**1- AUTHORS:** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Enhancement of Room Temperature Coercivity by Mechanical Alloying Ferromagnetic and Antiferromagnetic Materials"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** International Workshop on Magnetic Fine Particles and Their Relevance to Materials Science  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 1999

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**2- AUTHORS:** J. Sort, J. Nogués, X. Amils, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Room temperature coercivity enhancement in mechanically alloyed ferromagnetic - antiferromagnetic composites"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** MRS Fall Meeting  
**PUBLICATION:** Mat. Res. Soc. Symp. Proc., 581 (2000) 641.  
**MEETING PLACE:** Boston, USA  
**YEAR:** 1999

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**3- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Enhancement of the room temperature coercivity and energy product in ball milled ferromagnetic-antiferromagnetic composites"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** NATO-ASI in Magnetic Storage  
**PUBLICATION:**  
**MEETING PLACE:** Rhodes, Greece  
**YEAR:** 2000

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**4- AUTHORS:** J. Nogués, J. Sort, X. Amils, J.S. Muñoz, S. Suriñach, M.D. Baró  
**TITLE:** "Aumento de la coercitividad y el producto de energía en imanes permanentes inducido por el acoplamiento ferromagnético-antiferromagnético"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Fira Internacional de tecnologies emergents, ciencia i empresa  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2000

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**5- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró, F. Dupont, G. Chouteau  
**TITLE:** "Coercivity and squareness enhancement in SmCo<sub>5</sub>-NiO"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 8<sup>th</sup> Joint MMM-Intermag  
**PUBLICATION:**  
**MEETING PLACE:** San Antonio, USA

**YEAR:** 2001

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**6- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Endurecimiento magnético inducido por el acoplamiento de materiales ferromagneticos con antiferromagneticos"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Reunion Nacional de Física del Estado Sólido  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2001

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**7- AUTHORS:** Ll. Casas, A. Roig, E. Rodríguez, E. Molins, J. Tejada and J. Sort  
**TITLE:** "Silica Aerogel-Iron Oxide Nanocomposites: Structural and Magnetic Properties".  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 6th International Symposium on Aerogels  
**PUBLICATION:**  
**MEETING PLACE:** Albuquerque, USA  
**YEAR:** 2000

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**8- AUTHORS:** M.M. Rico, J. Sort, S. Suriñach, J.S. Muñoz, J.M. Greneche, G.A. Pérez-Alcázar, M.D. Baró  
**TITLE:** "Influence of the B content on the structural and magnetic properties of Fe<sub>60</sub>Mn<sub>10</sub>Al<sub>30-x</sub>B<sub>x</sub> prepared by mechanical alloying"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** ISMANAM 2001  
**PUBLICATION:** Materials Science Forum 368-388 (2002) 497  
**MEETING PLACE:** Ann Arbor, Michigan, USA  
**YEAR:** 2001

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**9- AUTHORS :** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró, E. Chappel, F. Dupont, G. Chouteau  
**TITLE:** "Coercivity and Squareness Enhancement in Ball Milled SmCo<sub>5</sub>- Antiferromagnetic Powders"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Joint of European Magnetic Symposia (JEMS'01)  
**PUBLICATION:** Journal of Magnetism and Magnetic Materials 242-245 (2002) 1287  
**MEETING PLACE:** Grenoble, France  
**YEAR:** 2001

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**10- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró  
**TITLE:** "Magnetic Hardening Induced by Ferromagnetic-Antiferromagnetic Coupling"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** International Conference on Advances in Materials and Processing Technologies (AMPT'01)  
**PUBLICATION:**  
**MEETING PLACE:** Leganés, Madrid, Spain  
**YEAR:** 2001

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**11- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** "Correlation between stacking fault formation, allotropic phase transformations and magnetic properties of ball milled cobalt"

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Rapidly Quenched and Metastable Materials RQ11

**PUBLICATION:**

**MEETING PLACE:** Oxford, England

**YEAR:** 2002

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**12- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S. Muñoz, M.D. Baró

**TITLE:** "Endurecimiento magnético inducido por el acoplamiento de materiales ferromagnéticos antiferromagnéticos"

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** VII CONGRESS Nacional de Materiales

**PUBLICATION:**

**MEETING PLACE:** Madrid, Spain

**YEAR:** 2002

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**13- AUTHORS:** J. Sort, J. Nogués, S. Suriñach, J.S : Muñoz, M.D. Baró, S. De Brion, G. Chouteau

**TITLE:** "Hard magnetic properties of SmCo<sub>5</sub> + antiferromagnetic (NiO) and SmCo<sub>5</sub> + paramagnetic (CoO) composites synthesized by ball milling"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Conference on Magnetism and Magnetic Materials

**PUBLICATION:**

**MEETING PLACE:** Tampa, USA

**YEAR:** 2002

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**14- AUTHORS:** J. Nogués, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J. Bobo, U. Lüders, E. Haanappel, M.R. Fitzsimmons, A. Hoffmann, J.W. Cai

**TITLE:** "High field induced changes in exchange biased bilayers"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Conference on Magnetism and Magnetic Materials

**PUBLICATION:**

**MEETING PLACE:** Tampa, USA

**YEAR:** 2002

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**15- AUTHORS:** J. Sort, F. Garcia, B. Rodmacq, S. Auffret, B. Dieny

**TITLE:** "Large enhancement of perpendicular exchange bias by introduction of an ultrathin non-magnetic layer between the ferromagnetic and antiferromagnetic layers"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** International Conference on Magnetism ICM 2003

**PUBLICATION:** Journal of Magnetism and Magnetic Materials (2004) en prensa

**MEETING PLACE:** Rome, Italy

**YEAR:** 2003

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**16- AUTHORS:** M. Gich, Ll. Casas, A. Roig, E. Molins, M. Popovici, J. Sort, S. Suriñach, M.D. Baró, J.S. Muñoz, J. Nogués, L. Morellon and M.R. Ibarra

**TITLE:** "Ultralight transparent magnets"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** International Conference on Magnetism ICM 2003

**PUBLICATION:**  
**MEETING PLACE:** Rome, Italy  
**YEAR:** 2003

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**17- AUTHORS:** J. Camarero, Y. Pennec, F. Garcia, J. Sort, S. Pizzini, J. Vogel, B. Dieny  
**TITLE:** "Effects of interfacial exchange coupling on magnetization reversal in perpendicular exchange-biased (Pt/Co)<sub>n</sub>-FeMn systems"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XVIII International colloquium on magnetic films and surfaces  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2003

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**18- AUTHORS:** J. Nogués, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J.F. Bobo, U. Lüders, E. Haanappel, M.R. Fitzsimmons, A. Hoffmann, J.W. Cai  
**TITLE:** "Isothermal tuning of exchange bias using pulsed fields"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XVIII International colloquium on magnetic films and surfaces  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2003

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**19- AUTHORS:** V. Langlais, S. Doppiu, J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, J. Nogués  
**TITLE:** "Reduction of NiO at room temperature using ball milling in hydrogen"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 100 RSEF-RSEQ, XXIX Bienal de Física y Química  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2003

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**20- AUTHORS:** J. Sort, S. Suriñach, J.S. Muñoz, M.D. Baró, M. Wojcik, E. Jedryka, S. Nadolski, N. Shedulko, J. Nogués  
**TITLE:** "Role of stacking faults in the structural and magnetic properties of ball milled Co"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** International Conference on Magnetism ICM 2003  
**PUBLICATION:**  
**MEETING PLACE:** Rome, Italy  
**YEAR:** 2003

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**21- AUTHORS:** J. Sort, H. Glaczynska, U. Ebels, M. Giersig, J. Rybczynski, B. Dieny  
**TITLE:** "Exchange bias effects in nanosized dots prepared by nanosphere lithography"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Innovative Mass Storage Technologies Workshop, IMST (MINATEC 2003)  
**PUBLICATION:**  
**MEETING PLACE:** Grenoble, France  
**YEAR:** 2003

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**22- AUTHORS :** J. Sort, B. Rodmacq, S. Auffret, B. Dieny  
**TITLE:** "Pinned synthetic ferrimagnets with perpendicular anisotropy and tunable exchange bias: promising structures to enhance performance of spin valves and tunnel junctions with perpendicular anisotropy"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Innovative Mass Storage Technologies Workshop, IMST (MINATEC 2003)  
**PUBLICATION:**  
**MEETING PLACE:** Grenoble, France  
**YEAR:** 2003

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**23- AUTHORS:** J. Sort, V. Langlais, S. Doppiu, B. Dieny, S. Suriñach, J.S. Muñoz, M.D. Baró, Ch. Laurent, J. Nogués  
**TITLE:** "Exchange coupling effects in Fe nanoparticles embedded in a Cr<sub>2</sub>O<sub>3</sub> matrix"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Trends in Nanotechnology 2003  
**PUBLICATION:** Nanotechnology 15 (2004) S211  
**MEETING PLACE:** Salamanca, Spain  
**YEAR:** 2003

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**24- AUTHORS:** M. Gich, Ll. Casas, A. Roig, M. Popovici, E. Molins, J. Sort, J. Nogués  
**TITLE:** "Ultralight transparent magnets"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 7th International Symposium on Aerogels  
**PUBLICATION:**  
**MEETING PLACE:** Alexandria, Virginia, USA  
**YEAR:** 2003

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**25- AUTHORS:** J. Sort, H. Glaczyńska, U. Ebels, M. Giersig, J. Rybczynski, B. Dieny  
**TITLE:** "Exchange bias effects in submicron dots prepared by nanosphere lithography"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 9th Joint MMM/Intermag  
**PUBLICATION:**  
**MEETING PLACE:** Anaheim, California, USA  
**YEAR:** 2004

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**26- AUTHORS:** J. Sort, B. Rodmacq, S. Auffret, B. Dieny  
**TITLE:** "Pinned synthetic ferrimagnets with perpendicular anisotropy and tuneable exchange bias"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 9th Joint MMM/Intermag  
**PUBLICATION:**  
**MEETING PLACE:** Anaheim, California, USA  
**YEAR:** 2004

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**27- AUTHORS:** J. Sort, V. Baltz, H. Glaczyńska, S. Landis, B. Rodmacq, U. Ebels, M. Giersig, J. Rybczynski, B. Dieny  
**TITLE:** "Comparative study of exchange bias properties in ferromagnetic-antiferromagnetic dots of different shapes prepared by different nanostructuring techniques"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 4th International Symposium on Metallic Multilayers, MML 2004

**PUBLICATION:**

**MEETING PLACE:** Boulder, Colorado, USA

**YEAR:** 2004

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**28- AUTHORS:** V. Langlais, S. Doppiu, J. Sort, B. Dieny, Ch. Laurent, S. Suriñach, J. S. Muñoz, M. D. Baró, J. Nogués

**TITLE:** "Structural and magnetic properties of metallic ferromagnetic – oxide antiferromagnetic nanocomposites prepared by reduction under H<sub>2</sub> atmosphere"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** 7th Internacional Conference on Nanostructured Materials

**PUBLICATION:**

**MEETING PLACE:** Wiesbaden, Germany

**YEAR:** 2004

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**29- AUTHORS:** M. Gich, A. Roig, M. Popovici, E. Molins, J. Sort, D. Baró, S. Suriñach, J. S. Muñoz, J. Nogués

**TITLE:** "Several synthetic routes to obtain ultra-light and/or transparent magnetic materials"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** III Reunión de Física del Estado Sólido

**PUBLICATION:**

**MEETING PLACE:** San Sebastián, Spain

**YEAR:** 2004

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**30- AUTHORS:** V. Baltz, J. Sort, B. Rodmacq, B. Dieny, S. Landis

**TITLE:** "Réseaux de plots ferromagnétique—antiferromagnétique sub 100 nm a anisotropie planaire"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Colloque Louis Néel

**PUBLICATION:**

**MEETING PLACE:** Grenoble, France

**YEAR:** 2004

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**31- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny

**TITLE:** "Exchange bias in ferromagnetic-antiferromagnetic bilayers sputtered onto pre-patterned 90nm square dots"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Joint of European Magnetic Symposia

**PUBLICATION:**

**MEETING PLACE:** Dresden, Germany

**YEAR:** 2004

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**32- AUTHORS:** J. Camarero, J. Miguel, F. Garcia, J. Vogel, S. Pizzini, F. Romanens, J. Sort, N. Brookes, B. Dieny, J. Goedkoop

**TITLE:** "Magnetization reversal study of perpendicular exchange coupled [Pt/Co]/FeMn films"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Joint of European Magnetic Symposia

**PUBLICATION:**

**MEETING PLACE:** Dresden, Germany

**YEAR:** 2004

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**33- AUTHORS:** F. Romanens, Y. Pennec, J. Sort, J. Vogel, B. Dieny, S. Pizzini  
**TITLE:** "Magnetization dynamics of exchange biased [Pt/Co]<sub>n</sub> multilayers studied by Kerr magnetometry"  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Joint of European Magnetic Symposia  
**PUBLICATION:**  
**MEETING PLACE:** Dresden, Germany  
**YEAR:** 2004

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**34- AUTHORS:** F. Romanens, J. Sort, J. Camarero, F. Yokaichiya, Y. Pennec, J. Vogel, B. Dieny, S. Pizzini  
**TITLE:** "Magnetization dynamics of (Pt/Co)-Pt-FeMn multilayers studied by Kerr magnetometry and time resolved Kerr microscopy"  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Internacional Workshop on Exchange Biased Magnetic Nanostructures  
**PUBLICATION:**  
**MEETING PLACE:** Anglet, France  
**YEAR:** 2004

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**35- AUTHORS:** J. Camarero, J. Sort, A. Hoffmann, J. M. García-Martín, B. Dieny, R. Miranda, J. Nogués  
**TITLE:** Anisotropy-dependent asymmetric magnetization reversal in exchange biased systems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Internacional Workshop on Exchange Biased Magnetic Nanostructures  
**PUBLICATION:**  
**MEETING PLACE:** Anglet, France  
**YEAR:** 2004

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**36- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny  
**TITLE:** Size effects on exchange bias in sub-100 nm ferromagnetic-antiferromagnetic dots deposited onto pre-patterned substrates  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Internacional Workshop on Exchange Biased Magnetic Nanostructures  
**PUBLICATION:**  
**MEETING PLACE:** Anglet, France  
**YEAR:** 2004

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**37- AUTHORS:** J. Camarero, J. Miguel, F. Garcia, J. Vogel, S. Pizzini, F. Romanens, J. Sort, N. B. Brookes, B. Dieny, J. B. Goedkoop  
**TITLE:** Study of the magnetization reversal of perpendicular exchange coupled [Fe/Co]<sub>n</sub>/FeMn films using soft x-ray scattering  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Internacional Workshop on Exchange Biased Magnetic Nanostructures  
**PUBLICATION:**  
**MEETING PLACE:** Anglet, France  
**YEAR:** 2004

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**38- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny

**TITLE:** "Ferromagnetic-antiferromagnetic exchange biased systems deposited onto sub-100 nm pre-patterned dots"

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Trends in Nanotechnology

**PUBLICATION:**

**MEETING PLACE:** Segovia, Spain

**YEAR:** 2004

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**39- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny

**TITLE:** "Ferromagnetic-antiferromagnetic exchange biased bilayers deposited on sub-100 nm dots"

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 49th MMM Conference

**PUBLICATION:**

**MEETING PLACE:** Jacksonville, Florida, USA

**YEAR:** 2004

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**40- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny

**TITLE:** Tailoring size effects on the exchange bias of ferromagnetic-antiferromagnetic nanodots

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** APS (American Physical Society), March meeting

**PUBLICATION:**

**MEETING PLACE:** Los Angeles, USA

**YEAR:** 2005

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**41- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny

**TITLE:** "Tailoring size effects on the exchange bias (enhancement/reduction) of sub- 100 nm ferromagnetic/antiferromagnetic nanostructures"

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Journées des Nanosciences Nanotechnologies en Rhône-Alpes

**PUBLICATION:**

**MEETING PLACE:** St. Martin d'Herès (France)

**YEAR:** 2005

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**42- AUTHORS:** J. Sort, J. Nogués, S. H. Chung, K. Buchanan, V. Novosad, A. Hoffmann

**TITLE:** Exchange biased vortices

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** APS (American Physical Society), March meeting

**PUBLICATION:**

**MEETING PLACE:** Los Angeles, USA

**YEAR:** 2005

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**43- AUTHORS:** S. Bruck, J. Sort, V. Baltz, S. Suriñach, J. S. Muñoz, M. D. Baró, B. Dieny, J. Nogués

**TITLE:** Exchange bias effects in [Pt/Co]-IrMn multilayers with perpendicular anisotropy

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Meeting of the German Physical Society

**PUBLICATION:**

**MEETING PLACE:** Berlin, Germany

YEAR: 2005

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**44- AUTHORS:** J. Sort, A. Hoffmann, S.-H. Chung, K. S. Buchanan, M. Grimsditch, M. D. Baró, B. Dieny, J. Nogués  
**TITLE:** Exchange biased vortices  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Nanospain (2nd meeting)  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2005

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**45- AUTHORS:** M. Gich, A. Roig, J. Sort, J. Nogués, C. Frontera, M. Popocivi, E. Molins  
**TITLE:** Sol-gel synthesis of  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles and tuning of the material magnetic properties  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Functional Materials for the 21st Century  
**PUBLICATION:**  
**MEETING PLACE:** Edinburgh, UK  
**YEAR:** 2005

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**46- AUTHORS:** A. Concustell, J. Sort, T.G. Woodcock, A. Gimazov, S. Suriñach, A. Gebert, J. Eckert, A. P. Zhilyaev, M.D. Baró  
**TITLE:** Microstructure and microhardness in nanostructured Ti<sub>60</sub>Cu<sub>14</sub>Ni<sub>12</sub>Sn<sub>4</sub>Nb<sub>10</sub> prepared by Cu-mould casting and high pressure torsión  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** ISMANAM 2005  
**PUBLICATION:**  
**MEETING PLACE:** Paris, France  
**YEAR:** 2005

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**47- AUTHORS:** A. Concustell, J. Sort, T.G. Woodcock, A. Gimazov, S. Suriñach, A. Gebert, J. Eckert, A. P. Zhilyaev, M.D. Baró  
**TITLE:** Enhanced microhardness in nanocrystalline Ti<sub>60</sub>Cu<sub>14</sub>Ni<sub>12</sub>Sn<sub>4</sub>Ta<sub>10</sub> processed by Cu-mould casting and high pressure torsion  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** The 4th International Conference on Bulk Metallic Glasses  
**PUBLICATION:**  
**MEETING PLACE:** Tennessee, USA  
**YEAR:** 2005

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**48- AUTHORS:** M. Gich, A. Roig, J. Sort, J. Nogués, C. Frontera, M. Popocivi, E. Molins  
**TITLE:** Sol-gel synthesis of epsilon Fe<sub>2</sub>O<sub>3</sub> nanoparticles and tuning of the material magnetic properties  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EUROMAT2005  
**PUBLICATION:**  
**MEETING PLACE:** Praga, Check Republic  
**YEAR:** 2005

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**49- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq and B. Dieny  
**TITLE:** Effets de tailles finies sur les proprietes d'anisotropie magnetique d'echange  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Colloque Louis Néel2005  
**PUBLICATION:**  
**MEETING PLACE:** Grenoble, France  
**YEAR:** 2005

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**50- AUTHORS:** E. Menéndez, J. Sort, V. Langlais, A. Zhilyaev, J. S. Muñoz, S. Suriñach, J. Nogués, M.D. Baró  
**TITLE:** Cold compaction of metal-ceramic composites using high pressure torsion  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** ISMANAM2005  
**PUBLICATION:**  
**MEETING PLACE:** Paris, France  
**YEAR:** 2005

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**51- AUTHORS:** G. Salazar, J. Sort, , S. Suriñach, J. Nogués, M.D. Baró, V. Skumryev, J. Nogués  
**TITLE:** Synthesis and characterisation of core-shell bi-magnetic nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Making Europe more attractive for researchers (Marie Curie Action)  
**PUBLICATION:**  
**MEETING PLACE:** Pisa, Italy  
**YEAR:** 2005

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**52- AUTHORS :** A. Bollero, V. Baltz, J. Sort, B. Rodmacq, and B. Dieny  
**TITLE:** Exchange bias properties in magnetic multilayered films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Making Europe more attractive for researchers (Marie Curie Action)  
**PUBLICATION:**  
**MEETING PLACE:** Pisa, Italy  
**YEAR:** 2005

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**53- AUTHORS:** J. Sort, A. Hoffmann, Seok-Hwan Chung, K. Buchanan, G. Salazar, M. Grimsditch, M. D. Baró, B. Dieny, J. Nogués  
**TITLE:** Magnetization reversal in ferromagnetic-antiferromagnetic dots: exchange biased vortices  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 50<sup>th</sup> Magnetism and Magnetic Materials Conference  
**PUBLICATION:**  
**MEETING PLACE:** San José, California, USA  
**YEAR:** 2005

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**54- AUTHORS:** A. Bollero, V. Baltz, L. Buda, B. Rodmacq, J. Sort, B. Dieny  
**TITLE:** Exchange-bias without antiferromagnetic layer in (Pt/Co) multilayer/Permalloy systems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 50<sup>th</sup> Magnetism and Magnetic Materials Conference  
**PUBLICATION:**

**MEETING PLACE:** San José, California, USA  
**YEAR:** 2005

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**55- AUTHORS:** J. Camarero, J. Miguel, F. Garcia, F. Romanens, J. Vogel, S. Pizzini, N. B. Brookes, J. Sort, B. Dieny, J. B. Goedkoop  
**TITLE:** Magnetization reversal, asymmetry, and role of uncompensated spins in perpendicular exchange coupled systems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 50<sup>th</sup> Magnetism and Magnetic Materials Conference  
**PUBLICATION:**  
**MEETING PLACE:** San José, California, USA  
**YEAR:** 2005

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**56- AUTHORS:** V. Baltz, J. Sort, S. Landis, B. Rodmacq, B. Dieny  
**TITLE:** Thermal activation effects on the exchange bias of ferromagnetic-antiferromagnetic nanostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 50<sup>th</sup> Magnetism and Magnetic Materials Conference  
**PUBLICATION:**  
**MEETING PLACE:** San José, California, USA  
**YEAR:** 2005

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**57- AUTHORS:** F. Romanens, S. Pizzini, F. Yokaichiya, M. Bonfim, Y. Pennec, J. Camarero, J. Vogel, J. Sort, F. Garcia, B. Rodmacq, B. Dieny  
**TITLE:** Asymmetric magnetization reversal of perpendicular exchange biased (Pt/Co) multilayers  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 50<sup>th</sup> Magnetism and Magnetic Materials Conference  
**PUBLICATION:**  
**MEETING PLACE:** San José, California, USA  
**YEAR:** 2005

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**58- AUTHORS:** A. Concustell, J. Sort, G. Alcalá, S. Mato, A. Gebert, J. Eckert, M. D. Baró  
**TITLE:** Shear-band formation and mechanical softening of different bulk metallic glasses during nanoindentation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MRS Fall Meeting  
**PUBLICATION:**  
**MEETING PLACE:** Boston, USA  
**YEAR:** 2005

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**59- AUTHORS:** J. Sort, M.D. Baró, G. Salazar, A. Hoffmann, S.H. Chung, K. Buchanan, M. Grimsditch, V. Baltz, S. Landis, B. Rodmacq, B. Dieny, J. Nogués  
**TITLE:** Exchange bias in ferromagnetic-antiferromagnetic nanostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XXX Reunión Bienal de la Real Sociedad Española de Física  
**PUBLICATION:**  
**MEETING PLACE:** Orense, Spain  
**YEAR:** 2005

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**60- AUTHORS:** A. Concustell, J. Sort, G. Alcalá, S. Mato, A. Gebert, J. Eckert and M. D. Baró  
**TITLE:** Plastic deformation and mechanical softening of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> bulk metallic glass during nanoindentation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XIV International Materials Research Congress  
**PUBLICATION:**  
**MEETING PLACE:** Cancún, Mexico  
**YEAR:** 2005

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**61- AUTHORS:** G. Salazar-Alvarez, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Transformation of superparamagnetic ε-Fe<sub>2</sub>O<sub>3</sub> nanoparticles into thermally-blocked by adsorption of cobalt (II)  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Trends in Nanotechnology 2005  
**PUBLICATION:**  
**MEETING PLACE:** Oviedo, Spain  
**YEAR:** 2005

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**62- AUTHORS:** G. Salazar-Alvarez, J. Sort, S. Suriñach, M. D. Baró, V. Skumryev, J. Nogués  
**TITLE:** Synthesis and characterization of core-shell bi-magnetic nanoparticles  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Marie-Curie European Conf.  
**PUBLICATION:**  
**MEETING PLACE:** Pisa/Livorno, Italy  
**YEAR:** 2005

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**63- AUTHORS:** N. Van Steenberge, J. Sort, A. Concustell, J. Das, S. Suriñach, J. Eckert, M. D. Baró  
**TITLE:** Crystallization behavior and nanoindentation measurements of Zr<sub>58.5</sub>Ti<sub>8.2</sub>Cu<sub>14.2</sub>Ni<sub>11.4</sub>Al<sub>7.7</sub>  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** The fifth international bulk metallic glasses conference  
**PUBLICATION:**  
**MEETING PLACE:** Awaji, Japan  
**YEAR:** 2006

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**64- AUTHORS:** N. Van Steenberge, J. Das, A. Concustell, J. Sort, S. Suriñach, J. Eckert, M. D. Baró  
**TITLE:** Influence of annealing on the microstructure and hardness of Ti<sub>67.79</sub>Fe<sub>28.36</sub>Sn<sub>3.85</sub> nanocomposite rods  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2006  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw, Poland  
**YEAR:** 2006

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**65- AUTHORS:** E. Menéndez, J. Sort, S. Suriñach, J. Nogués, M. D. Baró  
**TITLE:** Microstructure and magnetic properties of  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>/Co nanocomposite powders prepared by ball milling  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2006  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw, Poland  
**YEAR:** 2006

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**66- AUTHORS:** N. Van Steenberge, J. Das, A. Concustell, J. Sort, S. Suriñach, J. Eckert, M. D. Baró  
**TITLE:** Indentation size effect in Zr-based bulk metallic glasses  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** BMG Summer school  
**PUBLICATION:**  
**MEETING PLACE:** Torino, Italy  
**YEAR:** 2006

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**67- AUTHORS:** A. Concustell, J. Sort, G. Alcalá, S. Mato, A. Gebert, J. Eckert, A. L. Greer and M. D. Baró  
**TITLE:** Plastic and anelastic deformation and mechanical softening of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> bulk metallic glass during nanoindentation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Eighth International Workshop on Non-Crystalline Solids  
**PUBLICATION:**  
**MEETING PLACE:** Gijón, Spain  
**YEAR:** 2006

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**68- AUTHORS:** A. Bollero, L.D. Buda-Prejbeanu, V. Baltz, J. Sort, B. Rodmacq, B. Dieny  
**TITLE:** Exchange bias in systems composed of coupled ferromagnetic bilayers  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Innovative Mass Storage Technologies 2006  
**PUBLICATION:**  
**MEETING PLACE:** Grenoble, France  
**YEAR:** 2006

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**69- AUTHORS:** J. Sort, K.S. Buchanan, M. Grimsdicht, S.-H. Chung, V. Novosad, A. Hoffmann, G. Salazar-Alvarez, M. D. Baró, B. Dieny, J. Nogués  
**TITLE:** Controlling Magnetic Vortices through Exchange Bias  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** INTERMAG 2006  
**PUBLICATION:**  
**MEETING PLACE:** San Diego, USA  
**YEAR:** 2006

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**70- AUTHORS:** J. Sort, S. Brück, V. Baltz, S. Suriñach, J.S. Muñoz, B. Dieny, M.D. Baró, J. Nogués  
**TITLE:** Exploiting exchange bias length scales to fully tailor double-shifted hysteresis loops  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** INTERMAG 2006

**PUBLICATION:**  
**MEETING PLACE:** San Diego, USA  
**YEAR:** 2006

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**71- AUTHORS:** V. Baltz, J. Sort, A. Bollero, S. Landis, B. Rodmacq, B. Dieny  
**TITLE:** Finite size effects on the exchange bias properties of ferromagnetic / antiferromagnetic bilayers  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** INTERMAG 2006  
**PUBLICATION:**  
**MEETING PLACE:** San Diego, USA  
**YEAR:** 2006

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**72- AUTHORS:** E. Menéndez, J. Sort, A. Concustell, S. Suriñach, K. V. Rao, J. Farran, S. C. Deevi, J. Nogués, M. D. Baró  
**TITLE:** Periodic arrays of micron and submicron magnetic structures prepared by selective deformation of non-magnetic substrates  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Jornada de Nanofabricación  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2006

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**73- AUTHORS:** G. Salazar-Alvarez, J. Sort, A. Uheida, M. Muhammed, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Controlling the blocking temperature of iron oxide nanoparticles via adsorption/desorption of Co(II) ions  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XVIII Latin American Symposium of Solid State Physics  
**PUBLICATION:**  
**MEETING PLACE:** Puebla, Mexico  
**YEAR:** 2006

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**74- AUTHORS:** N. Van Steenberge, A. Concustell, J. Sort, J. Das, A. Gebert, S. Suriñach, J. Eckert, M. D. Baró  
**TITLE:** Improvement of plasticity of  $Zr_{55}Cu_{30}Al_{10}Ni_5$  induced by low temperature annealing  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Summer school on women in nano: Career Research Trends  
**PUBLICATION:**  
**MEETING PLACE:** Coma-ruga, Spain  
**YEAR:** 2007

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**75- AUTHORS:** M. Tanase, A. Petford-Long, R. Divan, L. Ocola, K. S. Buchanan, J. Sort  
**TITLE:** Magnetization reversal in exchange biased nanostructures  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** APS/CNM/EMC Users Meeting 2007  
**PUBLICATION:**  
**MEETING PLACE:** Argonne, USA  
**YEAR:** 2007

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**76- AUTHORS:** G. Salazar-Alvarez, J. Sort, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Interface exchange-coupling in bimagnetic core|shell nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XII International Conference on Intergranular and Interphase Boundaries in Materials  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2007

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**77- AUTHORS:** E. Menéndez, J. Sort, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Microstructure, magnetic and mechanical properties of Co/ $\alpha$ -Al<sub>2</sub>O<sub>3</sub> nanocomposite powders cold-consolidated by high pressure torsion  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** XII International Conference on Intergranular and Interphase Boundaries in Materials  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2007

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**78- AUTHORS:** D. J. Keavney, X. F. Han, M. Grimsditch, J. Meersschant, A. Hoffmann, Y. Ji, J. Sort, J. Nogués, R. Divan, J. E. Pearson, K. Yu. Guslienko, S. D. Bader  
**TITLE:** Magnetization dynamics in patterned structures imaged using time-resolved PEEM  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 10<sup>th</sup> Joint MMM/Intermag Conference  
**PUBLICATION:**  
**MEETING PLACE:** Baltimore, United States  
**YEAR:** 2007

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**79- AUTHORS:** M. S. Gabor, T. Jourdan, V. Baltz, A. Bollero, J. Sort, B. Rodmacq, F. Lançon, and B. Dieny  
**TITLE:** Numerical investigation of finite size effects on exchange biased nanostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 10<sup>th</sup> Joint MMM/Intermag Conference  
**PUBLICATION:**  
**MEETING PLACE:** Baltimore, United States  
**YEAR:** 2007

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**80- AUTHORS:** E. Menéndez, J. Sort, G. Salazar-Alvarez, S. Suriñach, A.P. Zhilyaev, M.D. Baró, J. Nogués  
**TITLE:** Microstructural and mechanical properties of Co/ $\alpha$ -Al<sub>2</sub>O<sub>3</sub> nanocomposite powders cold-consolidated by high pressure torsion  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2007  
**PUBLICATION:**  
**MEETING PLACE:** Korfu, Greece  
**YEAR:** 2007

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**81- AUTHORS:** K. S. Buchanan, S. Chung, A. Hoffman, F. Fradin, S. Bader, J. Sort  
**TITLE:** Translational-Mode Dynamics of Exchange-Biased Vortices

**TYPE OF PRESENTATION:** ORAL  
**CONFERENCE:** 52<sup>nd</sup> Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Tampa, USA  
**YEAR:** 2007

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**82- AUTHORS:** E. Menéndez, J. Sort, M.O. Liedke, J. Fassbender, T. Gemming, A. Weber, L.J. Heyderman, S. Suriñach, A. Concustell, S.C. Deevi, M.D. Baró, J. Nogués  
**TITLE:** Micro/Nanoscale Patterning of Magnetic Structures on FeAl alloys  
**TYPE OF PRESENTATION:** ORAL  
**CONFERENCE:** 52<sup>nd</sup> Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Tampa, USA  
**YEAR:** 2007

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**83- AUTHORS:** E. Jiménez, J. Camarero, N. Mikuszeit, R. Miranda, J. M. García-Martín, J. Sort, J. Nogués, A. Hoffmann, B. Dieny  
**TITLE:** Asymmetry reversal phenomena in exchange biased systems: role of anisotropies and interfacial magnetic frustration  
**TYPE OF PRESENTATION:** ORAL  
**CONFERENCE:** 52<sup>nd</sup> Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Tampa, USA  
**YEAR:** 2007

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**84- AUTHORS:** A. Bollero, B. Dieny, J. Sort, K. S. Buchanan, S. Landis, J. Nogués  
**TITLE:** Exchange bias effects in nano-patterned perpendicularly coupled [Pt/Co]-NiFe bilayers  
**TYPE OF PRESENTATION:** ORAL  
**CONFERENCE:** 52<sup>nd</sup> Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Tampa, USA  
**YEAR:** 2007

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**85- AUTHORS:** M. Tanase, A. K. Petford-Long, K. S. Buchanan, J. Sort  
**TITLE:** Magnetization Reversal in exchange biased nanostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONFERENCE:** 52<sup>nd</sup> Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Tampa, USA  
**YEAR:** 2007

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**86- AUTHORS:** A. Concustell, J. Sort, J. Das, A. Gebbert, J. Eckert, M. D. Baró  
**TITLE:** Influence of the Zr content on the thermal and mechanical properties of  $\text{Cu}_{60}\text{Zr}_x\text{Ti}_{40-x}$  ( $20 < x < 30$ ) bulk metallic glasses  
**TYPE OF PRESENTATION:** ORAL  
**CONFERENCE:** Bulk Metallic Glasses-Europe Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Paris, France  
**YEAR:** 2007

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**87- AUTHORS:** J. Fornell, A. Concustell, S. Suriñach, A. Gebert, M. D. Baró, J. Sort  
**TITLE:** Strain hardening behaviour of nanocomposite  $Ti_{60}Cu_{14}Ni_{12}Sn_4Nb_{10}$  alloys  
**TYPE OF PRESENTATION:** POSTER  
**CONFERENCE:** Strengthening the role of women in Nano  
**PUBLICATION:**  
**MEETING PLACE:** Dresden, Germany  
**YEAR:** 2007

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**88- AUTHORS:** N. Van Steenberge, A. Concustell, J. Sort, J. Das, A. Gebert, S. Suriñach, J. Eckert, M.D. Baró  
**TITLE:** Improvement of plasticity of bulk metallic glasses induced by low temperature annealing  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2007  
**PUBLICATION:**  
**MEETING PLACE:** Korfu, Greece  
**YEAR:** 2007

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**89- AUTHORS:** G. Salazar-Alvarez, J. Sort, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Size-dependent exchange bias of core|shell nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** International Congress on Nanoscience and Technology 2007  
**PUBLICATION:**  
**MEETING PLACE:** Stockholm, Sweden  
**YEAR:** 2007

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**90- AUTHORS:** E. Jiménez, J. Camarero, J. M. García-Martín, A. Hoffmann, J. Sort, J. Nogués, B. Dieny, R. Miranda  
**TITLE:** Role of anisotropies on the asymmetric magnetization reversal behavior in exchange-biased systems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 17<sup>th</sup> International Vacuum Congress  
**PUBLICATION:**  
**MEETING PLACE:** Stockholm, Sweden  
**YEAR:** 2007

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**91- AUTHORS:** A. Hoffmann, J. Sort, K. S. Buchanan, K. Y. Guslienko, G. Salazar-Alvarez, E. Menéndez, S.-H. Chung, V. Novosad, M. Grimsditch, J. E. Pearson, S. D. Bader A. Bollero, M. D. Baró, M. Miron, B. Rodmaq, B. Dieny, J. Nogués  
**TITLE:** Exchange Biased Magnetic Vortices  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 2<sup>nd</sup> Internal Workshop "Vortex Dynamics and its future" at the Research Center for Spin Dynamics and Spin-Wave Devices  
**PUBLICATION:**  
**MEETING PLACE:** Seoul, Korea  
**YEAR:** 2008

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**92- AUTHORS:** E. Jiménez, J. Camarero, J. Sort, J. Nogués, A. Hoffmann, J. M. García-Martín, B. Dieny, R. Miranda  
**TITLE:** Revisiting the asymmetry reversal phenomena in exchange biased systems: role of anisotropies and interfacial magnetic frustration  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Joint European Magnetic Symposium JEMS 2008  
**PUBLICATION:**  
**MEETING PLACE:** Dublin, Ireland  
**YEAR:** 2008

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**93- AUTHORS:** M. O. Liedke, T. Strache, W. Moller, E. Menéndez, J. Sort, J. Nogués, T. Gemming, A. Weber, L. J. Heyderman, K.V. Rao, S. C. Deevi, J. Fassbender  
**TITLE:** Ion irradiation induced sub-100nm ferromagnetic patterns  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 12<sup>th</sup> European Conference "Physics of Magnetism"  
**PUBLICATION:**  
**MEETING PLACE:** Krakow, Poland  
**YEAR:** 2008

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**94- AUTHORS:** E. Menéndez, A. Martinavicius, M.O. Liedke, G. Abrasonis, J. Fassbender, J. Sommerlatte, K. Nielsch, S. Suriñach, M.D. Baró, J. Nogués, J. Sort  
**TITLE:** Generation of micro/nano-scaled magnetic structures on AISI 304L austenitic stainless steel by ion beam nitriding  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 16th International Conference on Ion Beam Modification of Materials  
**PUBLICATION:**  
**MEETING PLACE:** Dresden, Germany  
**YEAR:** 2008

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**95- AUTHORS:** E. Menéndez, J. Sort, E. Jiménez, J. Camarero, M. O. Liedke, J. Fassbender, S. Suriñach, M. D. Baró, S.C. Deevi, K. V. Rao, A. Weber, L.J. Heyderman, J. Sommerlatte, K. Nielsch, J. Nogués  
**TITLE:** Direct magnetic patterning on paramagnetic FeAl sheets by ion irradiation through poly(methyl methacrylate) and porous alumina shadow masks  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Intermag 2008  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2008

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**96- AUTHORS:** M. Tanase, A. Petford-Long, R. Divan, L. Ocola, K. S. Buchanan, J. Sort  
**TITLE:** Magnetic reversal in patterned nanostructures with circular exchange-bias  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Intermag 2008  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2008

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**97- AUTHORS:** E. Menéndez, A. Martinavicius, M.O. Liedke, G. Abrasonis, J. Fassbender, J. Sort, S. Suriñach, M.D. Baró, J. Nogués

**TITLE:** Patterning of magnetic structures on austenitic stainless steel by ion beam nitriding  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Intermag 2008  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2008

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**98- AUTHORS:** E. Jiménez, J. Camarero, J. Sort, J. Nogués, N. Mikuszeit, J. M. García-Martín, A. Hoffmann, B. Dieny, R. Miranda  
**TITLE:** Role of Anisotropies on the Asymmetric Magnetization Reversal behaviour in Exchange-Biased Systems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Intermag 2008  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2008

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**99- AUTHORS:** J. Fornell, A. Concustell, S. Suriñach, W. Li, J. Caro, N. Cuadrado, M. D. Baró, J. Sort  
**TITLE:** Study of the deformation and fracture mechanisms in  $Ti_{40}Zr_{25}Ni_8Cu_9Be_{18}$  bulk metallic glass using compression tests and nanoindentation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** The 6th International Conference on Bulk Metallic Glasses  
**PUBLICATION:**  
**MEETING PLACE:** Xi'an, China  
**YEAR:** 2008

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**100- AUTHORS:** J. Sort, N. Van Steenberge, A. Concustell, S. Suriñach, J. Das, J. Eckert, M. D. Baró  
**TITLE:** Tailoring strain softening of metallic glasses during nanoindentation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** The 6th International Conference on Bulk Metallic Glasses  
**PUBLICATION:**  
**MEETING PLACE:** Xi'an, China  
**YEAR:** 2008

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**101- AUTHORS:** A. Concustell, J. Fornell, S. Suriñach, A. Gebert, J. Eckert, M. D. Baró, J. Sort  
**TITLE:** Study of the strain hardening behaviour of nanocomposite  $Ti_{60}Cu_{14}Ni_{12}Sn_4Nb_{10}$  alloys using nanoindentation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** The 6th International Conference on Bulk Metallic Glasses  
**PUBLICATION:**  
**MEETING PLACE:** Xi'an, China  
**YEAR:** 2008

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**102- AUTHORS:** A. Concustell, J. Sort, J. Fornell, S. Suriñach, A. Gebert, J. Eckert, M. D. Baró  
**TITLE:** Hardening mechanisms of a nanostructured eutectic in a Ti-base composite alloy  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Rapidly Quenched Materials (RQ13) Conference

**PUBLICATION:**  
**MEETING PLACE:** Dresden, Germany  
**YEAR:** 2008

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**103- AUTHORS:** W.J. Botta, M.F. de Oliveira, L.C. Aliaga, C. Bolfarini, J. Sort, A. Concustell, S. Suriñach, M.D. Baró, C.S. Kiminami  
**TITLE:** Topological Instability and Glass Forming Ability in the Cu-Zr-Ti System  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Rapidly Quenched Materials (RQ13) Conference  
**PUBLICATION:**  
**MEETING PLACE:** Dresden, Germany  
**YEAR:** 2008

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**104- AUTHORS:** J. Fornell, S. Surinyach, M. D. Baró, J. Sort  
**TITLE:** Correlation between the thermal and elastic properties of rare-earth bulk metallic glasses  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Euromat 2009  
**PUBLICATION:**  
**MEETING PLACE:** Glasgow, United Kingdom  
**YEAR:** 2009

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**105- AUTHORS:** F.S. Santos, J. Sort, J. Fornell, M.D. Baró, S. Suriñach, C. Bolfarini, W.J. Botta, C.S. Kiminami  
**TITLE:** Comparison of mechanical behaviour under nanoindentation of a new Ni-based glassy alloy produced by melt-spinning and copper mould casting  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2009  
**PUBLICATION:**  
**MEETING PLACE:** Glasgow, United Kingdom  
**YEAR:** 2009

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**106- AUTHORS:** J. Fornell, A. Concustell, S. Suriñach, W. H. Li, N. Cuadrado, A. Gebert, M. D. Baró, J. Sort  
**TITLE:** Onset of plasticity and mechanical softening of Ti-based bulk metallic glass  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Euromat 2009  
**PUBLICATION:**  
**MEETING PLACE:** Glasgow, United Kingdom  
**YEAR:** 2009

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**107- AUTHORS:** M. M. Medeiros, B. B. Medeiros, J. Sort, S. Suriñach, M. D. Baró, C. S. Kiminami, W. J. Botta, C. Bolfarini  
**TITLE:** Nanoindentation studies on beryllium-free titanium-based metallic glasses  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** ISMANAM 2009  
**PUBLICATION:**  
**MEETING PLACE:** Beijing, China  
**YEAR:** 2009

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**108- AUTHORS:** F.S. Santos, J. Sort, J. Fornell, M.D. Baró, S. Suriñach, C. Bolfarini, W.J. Botta, C.S. Kiminami  
**TITLE:** Mechanical behaviour under nanoindentation of new Ni-based amorphous alloys produced by rapid solidification  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Nanomat 2009  
**PUBLICATION:**  
**MEETING PLACE:** Mexico City, Mexico  
**YEAR:** 2009

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**109- AUTHORS:** E. Pellicer, A. Varea, S. Pané, B. J. Nelson, M. D. Baró, J. Nogués, J. Sort  
**TITLE:** Tailoring the mechanical and magnetic behavior of electrodeposited nanocrystalline CuNi thin films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ICAM 2009  
**PUBLICATION:**  
**MEETING PLACE:** Río de Janeiro, Brasil  
**YEAR:** 2009

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**110- AUTHORS:** M. Estrader, A. López-Ortega, G. Salazar-Alvarez, D. Tobia, E. Winkler, S. Estradé, I. Golosovsky, J. Sort, J. Arbiol, F. Peiró, S. Suriñach, R.D. Zysler, M.D. Baró, J. Nogués  
**TITLE:** Exchange bias in inverted Antiferromagnetic-core|Ferrimagnetic-shell nanoparticles  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** TNT 2009  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2009

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**111- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, J. Sort, J. Arbiol, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Hetero-Onion-like, multilayered, core-Fe<sub>3</sub>O<sub>4</sub>|shell1-MnFe<sub>2</sub>O<sub>4</sub>|shell2-γ-Mn<sub>2</sub>O<sub>3</sub> nanoparticles  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** TNT 2009  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2009

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**112- AUTHORS:** E. Jiménez, J. Camarero, J. Sort, J. Nogués, A. Hoffmann, J. M. García-Martín, B. Dieny, R. Miranda  
**TITLE:** Non-symmetric magnetic behavior in exchange biased systems induced by non-collinear coupling  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** International Conference on Magnetism  
**PUBLICATION:**  
**MEETING PLACE:** Karlsruhe, Germany  
**YEAR:** 2009

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**113- AUTHORS:** E. Jiménez, J. Camarero, J. Sort, J. Nogués, N. Mikuszeit, A. Hoffmann, J. M. García-Martín, B. Dieny, R. Miranda  
**TITLE:** Frustration induced anisotropies in exchange bias systems  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** International Conference on Magnetism  
**PUBLICATION:**  
**MEETING PLACE:** Karlsruhe, Germany  
**YEAR:** 2009

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**114- AUTHORS:** M. Estrader, A. López Ortega, G. Salazar Alvarez, J. Sort, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Magnetic properties of bi-magnetic, antiferromagnetic-ferrimagnetic, FeO-core|Fe<sub>3</sub>O<sub>4</sub>-shell nanoparticles  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** International Conference on Magnetism  
**PUBLICATION:**  
**MEETING PLACE:** Karlsruhe, Germany  
**YEAR:** 2009

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**115- AUTHORS:** E. Jiménez, J. Camarero, P. Perna, N. Mikuszeit, F. J. Teran, J. Sort, J. Nogués, J. M. García-Martín, A. Hoffmann, B. Dieny, R. Miranda  
**TITLE:** Role of anisotropy configuration in exchange-biased systems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 55<sup>th</sup> Annual Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Atlanta, USA  
**YEAR:** 2010

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**116- AUTHORS:** J. Sort, A.Varea, L. F. Bonavina, C. Souza, W. J. Botta, C. Bolfarini, C. S. Kiminami, S. Suriñach, M. D. Baró, J. Nogués  
**TITLE:** Out-of-plane magnetic patterning based on nanoindentation-induced crystallization of metallic glasses  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 55<sup>th</sup> Annual Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Atlanta, USA  
**YEAR:** 2010

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**117- AUTHORS:** E. Jimenez, J. Camarero, P. Perna, F. Teran, N. Mikuszeit, J. Sort, J. Nogués, B. Dieny, A. Hoffman, J. M. Garcia-Martín, R.Miranda  
**TITLE:** Towards tailoring magnetic properties in exchange-biased system  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Joint European Magnetic Symposium JEMS 2010  
**PUBLICATION:**  
**MEETING PLACE:** Kraków, Polonia  
**YEAR:** 2010

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**118- AUTHORS:** E. Pellicer, A. Varea, K. M. Sivaraman, S. Pané, B. J. Nelson, S. Suriñach, M. D. Baró, J. Sort  
**TITLE:** From micro to nano: improving the mechanical properties of electroplated Cu-Ni films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2010  
**PUBLICATION:**  
**MEETING PLACE:** Zürich, Suiza  
**YEAR:** 2010

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**119- AUTHORS:** J. Fornell, S. González, E. Rossinyol, S. Suriñach, M.D. Baró, D.V. Louzguine-Luzgin, J.H. Perepezko, J.Sort, A. Inoue  
**TITLE:** Correlation between structural changes and enhanced mechanical properties during thermally-induced devitrification of Fe-Co-B-Si-Nb bulk metallic glass  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2010  
**PUBLICATION:**  
**MEETING PLACE:** Zürich, Suiza  
**YEAR:** 2010

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**120- AUTHORS:** S. González, J. Sort, D.V. Louzguine-Luzgin, J.H. Perepezko, M.D. Baró, A. Inoue  
**TITLE:** Tuning the mechanical behavior of Al-based composites by addition of Pd  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2010  
**PUBLICATION:**  
**MEETING PLACE:** Zürich, Suiza  
**YEAR:** 2010

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**121- AUTHORS:** M.D. Baró, E. Pellicer, E. Rossinyol, S. Suriñach, J. Sort  
**TITLE:** La creatività delle donne come elemento di innovazione in ricerca e impresa  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Activities undertaken by the uab team within the wp2 framework of the Diversity FP7 project  
**PUBLICATION:**  
**MEETING PLACE:** Torino, Italia  
**YEAR:** 2010

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**122- AUTHORS:** K. Krycka, J. Borchers, J. Nogués, G. Salazar-Álvarez, J. Sort  
**TITLE:** Unique Separation of Core-Shell Nanoparticle Components using Resonant X-Ray Scattering  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** March Meeting American Physical Society  
**PUBLICATION:**  
**MEETING PLACE:** Oregon, USA  
**YEAR:** 2010

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**123- AUTHORS:** J. Sort, J. Fornell, S. Suriñach, A. Concustell, N. Van Steenberge, M. D. Baró, A. Gebert, J. Eckert, W. H. Li  
**TITLE:** Nanoindentation on metallic glasses  
**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** International Workshop of Non-Crystalline Solids

**PUBLICATION:**

**MEETING PLACE:** Barcelona, Spain

**YEAR:** 2010

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**124- AUTHORS:** E. Pellicer, A. Varea, K. Sivaraman, S. Pané, B. J. Nelson, M. Estrader, S. Suriñach, M. D. Baró, J. Nogués, J. Sort

**TITLE:** From micro to nano: improving the properties of electrodeposited Cu-Ni alloys

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** VI<sup>o</sup> encuentro franco-español de química y física del estado sólido

**PUBLICATION:**

**MEETING PLACE:** Tarragona, Spain

**YEAR:** 2010

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**125- AUTHORS:** J. Sort, J. Fornell, A. Varea, S. Suriñach, E. Rossinyol, M. D. Baró, L. F. Bonavina, W. J. Botta, C. Kiminami, C. Bolfarini, W. H. Li, J. Nogués

**TITLE:** Nanocrystallization of amorphous metallic alloys induced by nanoindentation: a novel magnetic patterning method

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Reunión de Nanomecánica y nanoindentación

**PUBLICATION:**

**MEETING PLACE:** Barcelona, Spain

**YEAR:** 2010

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**126- AUTHORS:** M. A. Zeeshan, K. Shou, S. Schürle, E. Pellicer, S. Pané, J. Sort, K. M. Sivaraman, S. Fusco, S. Muntwyler, M. D. Baró, B. J. Nelson

**TITLE:** Ferromagnetic Nanowires as Potential Drug-Delivery Wireless Nanorobots

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** IEEE NanoMed

**PUBLICATION:**

**MEETING PLACE:** Macau, Hong-Kong

**YEAR:** 2010

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**127- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, J. Sort, F. Peiró, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Heterogeneous bi-magnetic core-Fe<sub>3</sub>O<sub>4</sub> |shell-γ-Mn<sub>2</sub>O<sub>3</sub> nanoparticles

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** 7<sup>th</sup> International Conference on Fine Particle Magnetism (ICFPM-2010)

**PUBLICATION:**

**MEETING PLACE:** Uppsala, Sweden

**YEAR:** 2010

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**128- AUTHORS:** M. Estrader, A. López-Ortega, G. Salazar-Alvarez, S. Estradé, J. Sort, J. D. Ardison, W. A. Macedo, F. Peiró, S. Suriñach, M. D. Baró, J. Nogués

**TITLE:** Magnetic properties of inverted Antiferromagnetic-core|Ferrimagnetic-shell, FeO|Fe<sub>3</sub>O<sub>4</sub>, nanoparticles

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** 7<sup>th</sup> International Conference on Fine Particle Magnetism (ICFPM-2010)

**PUBLICATION:**

**MEETING PLACE:** Uppsala, Sweden

**YEAR:** 2010

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**129- AUTHORS:** C. Tromas, J.-C. Stinville, E. Menéndez, P. Villechaise, J. Nogués, J. Sort, C. Templier, J. P. Riviere, A. Martinavicius, G. Abrasonis

**TITLE:** Anisotropy of the elastic and magnetic properties of expanded austenite in AISI 316L stainless steel

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Twelfth International Conference on Plasma Surface Engineering

**PUBLICATION:**

**MEETING PLACE:** Garmisch-Partenkirchen, Alemania

**YEAR:** 2010

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**130- AUTHORS:** E. Jimenez, J. Camarero, N. Mikuszeit, P. Perna, F. Teran, A. Bollero, J. Sort, J. Nogués, J. M. García-Martín, A. Hoffmann, B. Dieny, R. Miranda

**TITLE:** Towards tailoring magnetic properties in exchange-biased FM/AFM systems

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 56<sup>th</sup> Annual MMM Conference

**PUBLICATION:**

**MEETING PLACE:** Scottsdale, USA

**YEAR:** 2011

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**131- AUTHORS:** A. Bollero, V. Baltz, L. D. Buda-Prejbeanu, P. Perna, J. Sort, J. Nogués, B. Rodmacq, J. Camarero, R. Miranda, B. Dieny

**TITLE:** Tuning the exchange-bias phenomenon isothermally induced in coupled ferromagnetic [Pt/Co]/NiFe multilayers

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 56<sup>th</sup> Annual MMM Conference

**PUBLICATION:**

**MEETING PLACE:** Scottsdale, USA

**YEAR:** 2011

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**132- AUTHORS:** E. Pellicer, A. Varea, K. M. Sivaraman, S. Pané, S. Suriñach, M. D. Baró, J. Nogués, B. J. Nelson, J. Sort

**TITLE:** Enhanced and adjustable mechanical, magnetic and thermal properties of nanocrystalline Cu-Ni films by fine-tuning the exact alloy composition during electrodeposition

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Euromat 2011

**PUBLICATION:**

**MEETING PLACE:** Montpellier, France

**YEAR:** 2011

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**133- AUTHORS:** J. Fornell, N. Van Steenberge, A. Varea, E. Rossinyol, E. Pellicer, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Enhanced mechanical properties and in-vitro corrosion behavior of amorphous and devitrified Ti<sub>40</sub>Zr<sub>10</sub>Cu<sub>38</sub>Pd<sub>12</sub> metallic glass

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Euromat 2011

**PUBLICATION:**

**MEETING PLACE:** Montpellier, France

**YEAR:** 2011

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**134- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, J. Sort, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Bi-magnetic core-MnFe<sub>2</sub>O<sub>4</sub>|shell-FeMn<sub>2</sub>O<sub>4</sub> nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2011  
**PUBLICATION:**  
**MEETING PLACE:** Montpellier, France  
**YEAR:** 2011

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**135- AUTHORS:** M. Estrader, A. López-Ortega, G. Salazar-Alvarez, S. Estradé, J. Sort, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Large Exchange Bias in Inverted Antiferromagnetic|Ferrimagnetic Core|Shell nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2011  
**PUBLICATION:**  
**MEETING PLACE:** Montpellier, France  
**YEAR:** 2011

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**136- AUTHORS:** K. M. Sivaraman, S. Pané, O. Ergeneman, E. Pellicer, K. Shou, S. Suriñach, M. D. Baró, J. Sort, B. J. Nelson  
**TITLE:** Novel electrodeposited cobalt–matrix nanocomposite coatings containing Y(OH)<sub>3</sub>/Y<sub>2</sub>O<sub>3</sub> phases  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2011  
**PUBLICATION:**  
**MEETING PLACE:** Montpellier, France  
**YEAR:** 2011

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**137- AUTHORS:** O. Ergeneman, K. Sivaraman, P.Eberle, G. Chatzipirpiridis, M. Suter, S. Pane, E. Pellicer, J. Sort, B. J. Nelson  
**TITLE:** Cobalt-Nickel Microcantilevers for Biosensing  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2011  
**PUBLICATION:**  
**MEETING PLACE:** Montpellier, France  
**YEAR:** 2011

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**138- AUTHORS:** C. Schütz, Z. Bacsik, J. Sort, L. Bergström, G. Salazar-Alvarez  
**TITLE:** Multifunctional materials based on nanocellulose-nanoparticle hybrids  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2011  
**PUBLICATION:**  
**MEETING PLACE:** Montpellier, France  
**YEAR:** 2011

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**139- AUTHORS:** A. Z. Muhammad, K. Shou, S. Pané, E. Pellicer, K. M. Sivaraman, M. D. Baró, J. Sort, B. J. Nelson

**TITLE:** Fabrication of CNT-based Magnetic Nanocapsules for Minimally Invasive Medicine  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2011  
**PUBLICATION:**  
**MEETING PLACE:** Montpellier, France  
**YEAR:** 2011

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**140- AUTHORS:** I. Golosovsky, G. Salazar-Alvarez, A. López-Ortega, M. González, J. Sort, M. Estrader, S. Suriñach, M. Baró, J. Nogués  
**TITLE:** Neutron diffraction study of the "inverted" bi-magnetic core/shell nanosystems  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 5th EUROPEAN CONFERENCE ON NEUTRON SCATTERING  
**PUBLICATION:**  
**MEETING PLACE:** Prague (Czech Republic)  
**YEAR:** 2011

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**141- AUTHORS:** A. López-Ortega, E. Pellicer, M. Cabo, M. Estrader, J. Sort, L. Yedra, S. Estradé, S. Suriñach, F. Peiró, M. D. Baró, J. Nogués  
**TITLE:** Ferrimagnetic  $\text{Fe}_x\text{Co}_{(2-x)}\text{O}_4$  nanostructures embedded in highly ordered antiferromagnetic  $\text{Co}_3\text{O}_4$  mesoporous templates  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Recent Trends in Nanomagnetism, Spintronics and their Applications  
**PUBLICATION:**  
**MEETING PLACE:** Ordizia, Spain  
**YEAR:** 2011

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**142- AUTHORS:** C. Schütz, Z. Bacsik, J. Sort, L. Bergström, G. Salazar-Alvarez  
**TITLE:** Synthesis and properties of nanocellulose–inorganic nanoparticle hybrids  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Soft and Hard Materials: a symposium on surface and materials chemistry  
**PUBLICATION:**  
**MEETING PLACE:** Lund (Sweden)  
**YEAR:** 2011

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**143- AUTHORS:** M. D. Baró, E. Pellicer, S. Suriñach, S. Pané, K. M. Sivaraman, O. Ergeneman, B. J. Nelson, J. Sort  
**TITLE:** Enhanced mechanical behaviour in nanostructured electrodeposited alloy and nanocomposite thin films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** The 14<sup>th</sup> International Conference on Rapidly Quenched and Metastable Materials  
**PUBLICATION:**  
**MEETING PLACE:** Salvador de Bahia (Brazil)  
**YEAR:** 2011

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**144- AUTHORS:** E. Jiménez, J. Camarero, P. Perna, N. Mikuszeit, J. Sort, J. Nogués, J. M. García-Martín, A. Hoffmann, B. Dieny, R. Miranda  
**TITLE:** Towards tailoring magnetic properties in exchange biased systems  
**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures (ACSIN-11)

**PUBLICATION:**

**MEETING PLACE:** St. Petersburg, Russia

**YEAR:** 2011

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**145- AUTHORS:** L. C. R. Aliaga, J. Fornell, J. Sort, S. Suriñach, M. D. Baró, C. S. Kiminami, C. Bolfarini, W. J. Botta

**TITLE:** Comparative study of nanoindentation on melt-spun ribbon and bulk metallic glass of Ni<sub>60</sub>Nb<sub>37</sub>B<sub>3</sub> alloy

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** The 14<sup>th</sup> International Conference on Rapidly Quenched and Metastable Materials

**PUBLICATION:**

**MEETING PLACE:** Salvador de Bahia (Brazil)

**YEAR:** 2011

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**146- AUTHORS:** J. Fornell, N. Van Steenberge, A. Varea, E. Rossinyol, E. Pellicer, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Enhanced mechanical properties and in-vitro corrosion behavior of amorphous and devitrified Ti<sub>60</sub>Zr<sub>10</sub>Cu<sub>38</sub>Pd<sub>12</sub> metallic glass

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ISMANAM 2011

**PUBLICATION:**

**MEETING PLACE:** Gijón (Spain)

**YEAR:** 2011

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**147- AUTHORS:** J. Fornell, N. Van Steenberge, S. Suriñach, M.D. Baró, J. Sort

**TITLE:** Effect of Si addition on the microstructure and mechanical properties of low cost Ti-based nanocomposite alloys

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** ISMANAM 2011

**PUBLICATION:**

**MEETING PLACE:** Gijón (Spain)

**YEAR:** 2011

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**148- AUTHORS:** A. López-Ortega, E. Pellicer, M. Cabo, M. Estrader, J. Sort, Ll.Yedra, S. Estradé, S. Suriñach, F. Peiró, M. D. Baró, J. Nogués

**TITLE:** Ferrimagnetic Fe<sub>x</sub>Co<sub>(2-x)</sub>O<sub>4</sub> nanostructures embedded in highly ordered antiferromagnetic Co<sub>3</sub>O<sub>4</sub> mesoporous templates

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Villa Conference on Interactions Among Nanostructures 2011 (VCIAN 2011)

**PUBLICATION:**

**MEETING PLACE:** Las Vegas, USA

**YEAR:** 2011

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**149- AUTHORS:** A. Varea, E. Pellicer, K.M. Sivaraman, S. Pané, B.J. Nelson, Suriñach, M.D. Baró, J. Nogués, J. Sort

**TITLE:** High-performance electrodeposited nanocrystalline Cu-Ni thin films

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** BCNano'11  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2011

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**150- AUTHORS:** E. García-Lecina, I. García-Urrutia, J. A. Díez, E. Pellicer, J. Sort  
**TITLE:** Electrodeposición y caracterización de recubrimientos nanocomposite de Ni/TiO<sub>2</sub>  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XXXIII Reunión del Grupo de Electroquímica de la Real Sociedad Española de Química  
**PUBLICATION:**  
**MEETING PLACE:** Miraflores de la Sierra, Madrid (Spain)  
**YEAR:** 2012

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**151- AUTHORS:** M. Estrader, A. López-Ortega, G. Salazar-Alvarez, S. Estradé, I. Golosovsky, J. Sort, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Heterostructured Bi-magnetic soft-hard core-shell nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MRS Spring Meeting  
**PUBLICATION:**  
**MEETING PLACE:** San Francisco, USA  
**YEAR:** 2012

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**152- AUTHORS:** A. López-Ortega, M. Estrader, G. Salazar-Alvarez, S. Estradé, J. Sort, F. Peiró, S. Suriñach, M.D. Baró, J. Nogués  
**TITLE:** Bi-magnetic soft|hard core-MnFe<sub>2</sub>O<sub>4</sub>|shell-FeMn<sub>2</sub>O<sub>4</sub> nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** SUDOE Workshop on Nanomagnetism and Spintronics  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2012

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**153- AUTHORS:** A. M. Zeeshan, S. K. Youn, S. Pané, E. Pellicer, S. Fusco, S. Schuerle, M. D. Baró, J. Sort, H. G. Park, B. J. Nelson  
**TITLE:** Ferromagnetic Nanowires Coated with Graphitic Surfaces as Potential Drug Delivery Nanoplatfoms  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** MRS Spring Meeting  
**PUBLICATION:**  
**MEETING PLACE:** San Francisco, USA  
**YEAR:** 2012

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**154- AUTHORS:** S. Pané, E. Pellicer, K. M. Sivaraman, A. M. Zeeshan, S. Schuerle, M. D. Baró, J. Nogués, J. Sort, B. J. Nelson  
**TITLE:** Tunable Magnetic Properties of Electrochemically Deposited CoNiReP Alloys: From Nanostructured Thin Films to Templated Nanoarchitectures  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** MRS Spring Meeting  
**PUBLICATION:**  
**MEETING PLACE:** San Francisco, USA

**YEAR:** 2012

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**155- AUTHORS:** S. Schürle, S. Pané, E. Pellicer, J. Sort, M. D. Baró, B. J. Nelson  
**TITLE:** Magnetic Manipulation of Liposomal Microstructures in Plant-Based Blood Vessel Phantoms  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** IEEE-NEMS 2012  
**PUBLICATION:**  
**MEETING PLACE:** Kyoto (Japan)  
**YEAR:** 2012

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**156- AUTHORS:** G. Salazar-Alvarez, J. Sort, C. Schütz, D. Gebauer, Z. Bacsik, L. Berglund, L. Bergström  
**TITLE:** Properties and Structuring of Hybrids Based on Nanocellulose and Functional Nanoparticles  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Bio-inspired materials  
**PUBLICATION:**  
**MEETING PLACE:** Postdam (Germany)  
**YEAR:** 2012

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**157- AUTHORS:** A. M. Zeeshan, S. Pané, E. Pellicer, S. Schürle, J. Sort, M. D. Baró, B. J. Nelson  
**TITLE:** Carbonaceous Magnetic Nanocapsules for Drug Delivery  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** IEEE-NEMS2012  
**PUBLICATION:**  
**MEETING PLACE:** Kyoto (Japan)  
**YEAR:** 2012

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**158- AUTHORS:** E. García-Lecina, I. García-Urrutia, J.A. Díez, E. Pellicer, J. Sort  
**TITLE:** Tribological and corrosion properties of Ni/TiO<sub>2</sub> nanocomposite coatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EuroCorr 2012  
**PUBLICATION:**  
**MEETING PLACE:** Istambul (Turkey)  
**YEAR:** 2012

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**159- AUTHORS:** J. Sort, E. Pellicer, S. González, J. Fornell, P. Solsona, A. Blanquer, L. Barrios, E. Ibáñez, C. Nogués, S. Suriñach, M. D. Baró  
**TITLE:** Effects of Pd addition on the biodegradability, mechanical behavior and cytocompatibility of Mg<sub>72</sub>Zn<sub>23</sub>Ca<sub>5</sub> metallic glass  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2012  
**PUBLICATION:**  
**MEETING PLACE:** Moscow (Russia)  
**YEAR:** 2012

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**160- AUTHORS:** J. Sort, J. Fornell, A. Concustell, A.L. Greer, S. Suriñach, M. D. Baró

**TITLE:** Effects of shot peening on the surface mechanical properties of  $\text{Cu}_{47.5}\text{Zr}_{47.5}\text{Al}_5$  metallic glass

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** ISMANAM 2012

**PUBLICATION:**

**MEETING PLACE:** Moscow (Russia)

**YEAR:** 2012

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**161- AUTHORS:** A. P. Hynowska, J. Fornell, E. Pellicer, S. González, N. Van Steenberge, S. Suriñach, M. D. Baró, J. Eckert, J. Sort

**TITLE:** Mechanical behavior and corrosion resistance of nanostructured  $\text{Ti}_{67.79}\text{Fe}_{28.36}\text{Sn}_{3.85}$  and  $\text{Ti}_{53}\text{Nb}_{35}\text{Zr}_7\text{Ta}_5$  alloys for biomedical applications

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** TMS 2012

**PUBLICATION:**

**MEETING PLACE:** Orlando, USA

**YEAR:** 2012

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**162- AUTHORS:** A. P. Hynowska, J. Fornell, E. Pellicer, S. González, N. Van Steenberge, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Comparative study of the microstructure and elastic/mechanical properties of Ti-Zr-Cu-Pd-(Nb) and Ti-Zr-Fe-(Hf) alloys

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Summer School BioTiNet

**PUBLICATION:**

**MEETING PLACE:** Caldes d'Estrach (Spain)

**YEAR:** 2012

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**163- AUTHORS:** N. Tsyntsar, H. Cesiulis, E. Pellicer, J. Sort, J.-P. Celis

**TITLE:** Structural, Magnetic and Mechanical Properties of Electrodeposited Co-W Thin Films

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** NANOSMAT 2012

**PUBLICATION:**

**MEETING PLACE:** Prague, Czech Republic

**YEAR:** 2012

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**164- AUTHORS:** E. García-Lecina, I. García-Urrutia, J. A. Díez, E. Pellicer, J. Sort

**TITLE:** Effect of ultrasound agitation on the codeposition of inorganic fullerene-like nanoparticles of  $\text{WS}_2$  in an electrodeposited nickel matrix

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Interfinish 2012

**PUBLICATION:**

**MEETING PLACE:** Milan, Italy

**YEAR:** 2012

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**165- AUTHORS:** S. Pané, E. Pellicer, K. M. Sivaraman, M. A. Zeeshan, B. Özkale, G. Chatzipirpiridis, O. Ergeneman, S. Fusco, S. Schürle, S. Suriñach, M. D. Baró, J. Sort, B. J. Nelson

**TITLE:** Pulse Electrodeposition: a promising methodology for building blocks of magnetic biomedical micro and nanorobotic devices

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Interfinish 2012

**PUBLICATION:**

**MEETING PLACE:** Milan, Italy

**YEAR:** 2012

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**166- AUTHORS:** Ll. Yedra, A. Eljarrat, R. Arenal, M. Cabo, A. López-Ortega, M. Estrader, E. Pellicer, J. Sort, M.D. Baró, S. Estradé, F. Peiró

**TITLE:** Accessing a new dimension of nanomaterials: EEL spectroscopic tomography

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** JEELS 2012 (Société Française des Microscopies)

**PUBLICATION:**

**MEETING PLACE:** Aix les Bains, France

**YEAR:** 2012

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**167- AUTHORS:** J. Fornell, N. Oliveira, E. Pellicer, N. Van Steenberge, M.D. Baró, C. Bolfarini, J. Sort

**TITLE:** Anodic nanotube formation on the surface of Ti-Nb-(Sn) alloys

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** XXVIII Trobades Científiques de la Mediterrània

**PUBLICATION:**

**MEETING PLACE:** Maó, Spain

**YEAR:** 2012

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**168- AUTHORS:** Ll. Yedra, A. Eljarrat, R. Arenal, E. Pellicer, M. Cabo, A. López-Ortega, M. Estrader, J. Sort, M. D. Baró, S. Estradé, Francesca Peiró

**TITLE:** EEL spectroscopic tomography: a new dimension to nanomaterials analysis

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 9<sup>th</sup> Spanish Conference on Electron Devices

**PUBLICATION:**

**MEETING PLACE:** Valladolid, Spain

**YEAR:** 2013

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**169- AUTHORS:** C. Schütz, S. Kochilas, Z. Bacsik, J. Sort, D. Gebauer, M. Salajkova, L. Berglund, L. Bergström, G. Salazar-Alvarez

**TITLE:** Biohybrids composed of amorphous calcium carbonate and nanocellulose crystals with different surface groups

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Third International Conference on Multifunctional, Hybrid and Nanomaterials

**PUBLICATION:**

**MEETING PLACE:** Sorrento, Italy

**YEAR:** 2013

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**170- AUTHORS:** E. Tolu, S. Garroni, E. Masolo, E. Pellicer, J. Sort, M.D. Baró

**TITLE:** Mesoporous materials for energy storage and production

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Third International Conference on Multifunctional, Hybrid and Nanomaterials

**PUBLICATION:**

**MEETING PLACE:** Sorrento, Italy

**YEAR:** 2013

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**171- AUTHORS:** S. Abdi, S. Oswald, A. Hynowska, M. Calin, L. Schultz, J. Eckert, M. D. Baró, J. Sort, A. Gebert  
**TITLE:** Fabrication, mechanical properties and corrosion behavior of Ti<sub>75</sub>Zr<sub>10</sub>Si<sub>15</sub>-based alloys for implant applications  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** TMS 2013  
**PUBLICATION:**  
**MEETING PLACE:** San Antonio, USA  
**YEAR:** 2013

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**172- AUTHORS:** I. Golvano, E. Rossinyol, A. Varea, M. Roldán, M.D. Baró, J. Sort, E. Pellicer  
**TITLE:** Characterization of electrodeposited Cu-Ni nanopillars by CSLM imaging  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 13th International ELMI meeting – 2013  
**PUBLICATION:**  
**MEETING PLACE:** Arcachon, France  
**YEAR:** 2013

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**173- AUTHORS:** A. Somayeh, S. Oswald, A. Hynowska, M. Calin, L. Schultz, J. Eckert, M.D. Baró, J. Sort, A. Gebert  
**TITLE:** Investigation of new Ti-based metallic glasses with improved mechanical properties and corrosion resistance for implant applications  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Biomat 2013  
**PUBLICATION:**  
**MEETING PLACE:** Weimar, Germany  
**YEAR:** 2013

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**174- AUTHORS:** M. Lorenzetti, E. Pellicer, J. Sort, M. D. Baró, S. Novak, S. Kobe  
**TITLE:** Anatase Nanostructured Coatings: Expectations on Biocompatibility and Surface Self-disinfection of Ti-based Implants  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 25th European Conference on Biomaterials  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2013

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**175- AUTHORS:** A. Blanquer, A. Hynowska, Ll. Barrios, E. Pellicer, E. Ibáñez, M. D. Baró, J. Sort, C. Nogués  
**TITLE:** Biocompatibility study of Ti<sub>40</sub>Cu<sub>38</sub>Zr<sub>10</sub>Pd<sub>12</sub> bulk metallic glass  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 25th European Conference on Biomaterials  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2013

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**176- AUTHORS:** M. Lorenzetti, E. Pellicer, J. Sort, M. D. Baró, S. Novak, S. Kobe  
**TITLE:** Corrosion behavior of anatase polycrystalline coatings on Ti-based body implants

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Fourth Regional Symposium on Electrochemistry of South-East Europe (RSE-SEE4)

**PUBLICATION:**

**MEETING PLACE:** Ljubljana, Slovenia

**YEAR:** 2013

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**177- AUTHORS:** J. Fornell, N.T.C. Oliveira, E. Pellicer, N. Van Steenberge, M. D. Baró, C. Bolfarini, J. Sort

**TITLE:** Anodic formation of self-organized Ti(Nb,Sn) oxide nanotube arrays with tuneable aspect ratio and size distribution

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ISMANAM 2013

**PUBLICATION:**

**MEETING PLACE:** Torino (Italy)

**YEAR:** 2013

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**178- AUTHORS:** M. Guerrero, S. Pané, M. D. Baró, M. Roldan, J. Sort, E. Pellicer

**TITLE:** New hierarchical porous Cu-doped BiOCl films: electrochemical synthesis, characterization and physical properties

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ISMANAM 2013

**PUBLICATION:**

**MEETING PLACE:** Torino (Italy)

**YEAR:** 2013

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**179- AUTHORS:** J. Fornell, E. Pellicer, E. García-Lecina, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Structural and mechanical modifications induced on Cu<sub>47.5</sub>Zr<sub>47.5</sub>Al<sub>5</sub> metallic glass by surface laser treatments

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** ISMANAM 2013

**PUBLICATION:**

**MEETING PLACE:** Torino (Italy)

**YEAR:** 2013

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**180- AUTHORS:** E. Pellicer, K. M. Sivaraman, M. D. Baró, S. Suriñach, B. J. Nelson, J. Sort, S. Pané

**TITLE:** Cost-effective composite electroplating from particle-free aqueous electrolytes

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ICCE-NANO 2013

**PUBLICATION:**

**MEETING PLACE:** Tenerife (Spain)

**YEAR:** 2013

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**181- AUTHORS:** M. Guerrero, M. A. Zeeshan, S. Pané, E. Pellicer, A. M. Lindo, K. M. Sivaraman, M. D. Baró, B. J. Nelson, J. Sort

**TITLE:** Assessment of the magnetic properties of metallic nanowires synthesized by template-assisted electrodeposition on silicon

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ICCE-NANO 2013

**PUBLICATION:**  
**MEETING PLACE:** Tenerife (Spain)  
**YEAR:** 2013

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**182- AUTHORS:** J. Sort, A. Varea, K. M. Sivaraman, M. Guerrero, I. García-Urrutia, J. A. Díez, M. D. Baró, S. Suriñach, J. Nogués, E. García-Lecina, B. J. Nelson, E. Pellicer  
**TITLE:** Advanced Ni-based electrodeposited nanocrystalline and nanocomposite coatings with enhanced mechanical and magnetic performance  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ICCE-NANO 2013  
**PUBLICATION:**  
**MEETING PLACE:** Tenerife (Spain)  
**YEAR:** 2013

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**183- AUTHORS:** E. García-Lecina, I. García-Urrutia, J. A. Díez, J. Fornell, E. Pellicer, J. Sort  
**TITLE:** Mechanical, tribological and corrosion performance of electrodeposited Ni/IF-WS<sub>2</sub> nanocomposite coatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Eurocorr 2013  
**PUBLICATION:**  
**MEETING PLACE:** Estoril (Portugal)  
**YEAR:** 2013

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**184- AUTHORS:** A. Varea, S. Pané, M. A. Zeeshan, B. Özkale, B. J. Nelson, S. Suriñach, M. D. Baró, J. Nogués, J. Sort, E. Pellicer  
**TITLE:** Template Electrodeposition of Ferromagnetic Cu-Ni Nanopillar Arrays with Large Composition Gradient  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MRS Fall Meeting & Exhibit  
**PUBLICATION:**  
**MEETING PLACE:** Boston (USA)  
**YEAR:** 2013

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**185- AUTHORS:** J. Fornell, E. Pellicer, N. C. T. Olivera, N. Van Steenberge, M. D. Baró, C. Bolfarini, J. Sort  
**TITLE:** Microstructure and mechanical behaviour of self-ordered Ti(Nb,Sn) oxide nanotube arrays  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** MRS Fall Meeting & Exhibit  
**PUBLICATION:**  
**MEETING PLACE:** Boston (USA)  
**YEAR:** 2013

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**186- AUTHORS:** A. Hynowska, E. Pellicer, J. Fornell, S. Suriñach, M. D. Baró, N. Van Steenberge, A. Blanquer E. Ibáñez, L.I. Barrios, C. Nogués, J. Sort  
**TITLE:** Novel nanostructured Ti-based alloys for biomedical applications  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** Thermec'2013  
**PUBLICATION:**  
**MEETING PLACE:** Las Vegas (USA)

**YEAR:** 2013

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**186- AUTHORS:** D. A. Gilbert, L. Ye, K. Liu, A. Vereá, S. Agramunt-Puig, N. del Valle, C. Navau, A. Sánchez, J. F. Lopez-Barbera, K.S. Buchanan, A. Hoffmann, J. Sort, J. Nogués  
**TITLE:** Tilted vortex and mixed reversal modes in exchange-biased nano-dots and nano-ellipses  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** 58th MMM  
**PUBLICATION:**  
**MEETING PLACE:** Denver (USA)  
**YEAR:** 2013

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**187- AUTHORS:** S. González, E. Pellicer, S. Suriñach, M. D. Baró, E. García-Lecina, J. Sort  
**TITLE:** Effect of thermally-induced surface oxidation on the mechanical properties and corrosion resistance of  $Zr_{60}Cu_{25}Al_{10}Fe_5$  bulk metallic glass  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** European Oxide Scale Conference (OXI 2014)  
**PUBLICATION:**  
**MEETING PLACE:** London (United Kingdom)  
**YEAR:** 2014

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**188- AUTHORS:** I. Golvano-Escobal, S. Pané, B. Özkale, S. Suriñach, M.D. Baró, E. Pellicer, J. Sort  
**TITLE:** Electrochemical deposition strategies for the growth of films and micro/nanostructures of Co-In and Co-Ni-W functional materials.  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** ISMANAM 2014  
**PUBLICATION:**  
**MEETING PLACE:** Cancun (Mexico)  
**YEAR:** 2014

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**189- AUTHORS:** J. Fornell, E. Menéndez, A. Hynowska, S. Suriñach, J. Montserrat, K. Temst, A. Vantomme, M. D. Baró, E. García-Lecina, E. Pellicer, J. Sort  
**TITLE:** Effect of room- and high- temperature  $Ar^+$  irradiation on the structure and properties of Zr- and Ti-based bulk metallic glasses  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** ISMANAM 2014  
**PUBLICATION:**  
**MEETING PLACE:** Cancun (Mexico)  
**YEAR:** 2014

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**190- AUTHORS:** E. Menéndez, C. Templier, J. F. Lopez-Barbera, K. Temst, A. Vantomme, J. Sort, and J. Nogués  
**TITLE:** Magnetic properties of expanded austenite  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** 19th International Conference on Ion Beam Modification of Materials  
**PUBLICATION:**  
**MEETING PLACE:** Leuven (Belgium)  
**YEAR:** 2014

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**191- AUTHORS:** J. Sort, J. Belzunce, A. Morán, J. M. Artime, M. Serrano, L. Sedano  
**TITLE:** Magnetic properties qualification of European RAFM steel ASTURFER  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** Magnetic properties qualification of European RAFM steel ASTURFER  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2014

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**192- AUTHORS:** I. Golvano-Escobal, S. Pané, B. Özkale, B. J. Nelson, S. Suriñach, M. D. Baró, E. Pellicer, J. Sort  
**TITLE:** Spontaneously formed spatio-temporal patterns in electrodeposited cobalt-indium films: structure, magnetism and mechanical properties  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** 2014 Collaborative Conference on Materials Research (CCMR)  
**PUBLICATION:**  
**MEETING PLACE:** Seoul (South Korea)  
**YEAR:** 2014

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**193- AUTHORS:** J. Zhang, E. Pellicer, J. Sort  
**TITLE:** Ferromagnetic electrodeposited porous Cu-Ni films: tunable wettability and improved electrocatalytic performance towards hydrogen evolution  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** 2014 Collaborative Conference on Materials Research (CCMR)  
**PUBLICATION:**  
**MEETING PLACE:** Seoul (South Korea)  
**YEAR:** 2014

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**194- AUTHORS:** I. Golvano-Escobal, S. Pané, B. Özkale, S. Suriñach, M.D. Baró, J. Sort, E. Pellicer  
**TITLE:** Magnetic and mechanical behaviour of spatio-temporal patterned cobalt-indium films grown by electrodeposition  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** Congreso Nacional de Materiales  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona (Spain)  
**YEAR:** 2014

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**195- AUTHORS:** B. Özkale, E. Pellicer, M.A. Zeeshan, J.F. López-Barberá, J. Nogués, J. Sort, B.J. Nelson, S. Pané  
**TITLE:** Metallopolymer Nanocomposite Fabrication by Bipolar Pulse Electrodeposition  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** 40th Micro and Nano Engineering 2014  
**PUBLICATION:**  
**MEETING PLACE:** Lausanne (Switzerland)  
**YEAR:** 2014

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**196- AUTHORS:** J. Sort, J. Belzunce, A. Morán, J.M. Artime, M. Serrano, L. Sedano  
**TITLE:** Magnetic properties quantification of European RAFM steel ASTURFER  
**TYPE OF PRESENTATION:** Poster

**CONGRESS:** 28th Symposium on Fusion Technology (SOFT 2014)

**PUBLICATION:**

**MEETING PLACE:** San Sebastian (Spain)

**YEAR:** 2015

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**197- AUTHORS:** B. Oezkale, N. Shamsudhim, G. Chatzipirpiridis, M. Hoop, X. Chen, F. Gramm, J. Sort, B. J. Nelson, E. Pellicer, S. Pané

**TITLE:** On-Demand Magnetically Triggered Drug Release with Segmented Nanowires

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** 2015 MRS Spring Meeting

**PUBLICATION:**

**MEETING PLACE:** San Francisco (United States)

**YEAR:** 2015

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**198- AUTHORS:** I. Golvano-Escobal, S. Suriñach, M.D. Baró, J. Sort, E. Pellicer

**TITLE:** Electrodeposition of rhodium-iron nanoparticles: control of size, composition and electrocatalytic properties for hydrogen evolution reaction

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** 2015 E-MRS Spring Meeting

**PUBLICATION:**

**MEETING PLACE:** Lille (France)

**YEAR:** 2015

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**199- AUTHORS:** J. Zhang, S. Agramunt, S. Pané, S. Estradé, F. Peiró, N. del Valle, M.D. Baró, C. Navau, A. Sánchez, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Controlled electrodeposition and magnetic properties of hard ferromagnetic (FM)/spacer/soft FM multisegmented nanowires

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** 2015 E-MRS Spring Meeting

**PUBLICATION:**

**MEETING PLACE:** Lille (France)

**YEAR:** 2015

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**200- AUTHORS:** H. Zhang, Y. Feng, D. Nieto, E. García-Lecina, M.D. Baró, E. Pellicer, J. Sort

**TITLE:** The influence of femtosecond laser irradiation on the surface morphology and properties of Fe-based bulk metallic glass

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** 2015 E-MRS Spring Meeting

**PUBLICATION:**

**MEETING PLACE:** Lille (France)

**YEAR:** 2015

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**201- AUTHORS:** J. M. Trigo-Rodríguez, C.E. Moyano-Camero, J. Sort, E. Pellicer, M. Martínez-Jiménez

**TITLE:** The mechanical properties of the Chelyabinsk chondrite parent asteroid inferred from nanoindentation

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** ScienTec Nano Days

**PUBLICATION:**

**MEETING PLACE:** Barcelona

**YEAR:** 2015

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**202- AUTHORS:** H.Y. Zhang, Y.P. Feng, D. Nieto, E. García-Lecina, M.D. Baró, E. Pellicer, J. Sort

**TITLE:** The influence of femtosecond laser irradiation on the surface morphology and properties of Fe-based bulk metallic glass

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** ISMANAM 2015

**PUBLICATION:**

**MEETING PLACE:** Paris (France)

**YEAR:** 2015

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**203- AUTHORS:** F. Mustaq, M. Guerrero, S. Sakar, A.M. Lindo, M.A. Zeeshan, J. Sort, B.J. Nelson, E. Pellicer, S. Pané

**TITLE:** 3D template-assisted electrodeposition of hybrid magnetic microrobots for photocatalytic targeted water cleaning

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** East Forum

**PUBLICATION:**

**MEETING PLACE:** Lund (Sweden)

**YEAR:** 2015

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**204- AUTHORS:** N. del-Valle, S. Agramunt-Puig, E. Pellicer, J. Zhang, J. Nogués, C. Navau, A. Sanchez, J. Sort

**TITLE:** Segmented nanowires for multi-level high-density magnetic data storage: modeling and experimental proof-of-concept

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** ICM 2015

**PUBLICATION:**

**MEETING PLACE:** Barcelona (Spain)

**YEAR:** 2015

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**205- AUTHORS:** I. Golvano-Escobal, S. Suriñach, M.D. Baró, S. Pané, J. Sort, E. Pellicer,

**TITLE:** Electrodeposited Rh-Fe films and nanoparticles for electrocatalytic hydrogen production

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** ENM Spain

**PUBLICATION:**

**MEETING PLACE:** San Sebastian (Spain)

**YEAR:** 2015

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**206- AUTHORS:** I. Golvano-Escobal, S. Suriñach, M.D. Baró, S. Pané, J. Sort, E. Pellicer

**TITLE:** Controlled electrodeposition of Rh-Fe nanoparticles for hydrogen evolution reaction applications

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** EDNANO-11

**PUBLICATION:**

**MEETING PLACE:** Balatönfured (Hungary)

**YEAR:** 2015

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**207- AUTHORS:** E. Pellicer, J. Zhang, A. Varea, B. Özkale, S. Suriñach, M.D. Baró, S. Pané, [J. Sort](#)

**TITLE:** Electrodeposited Cu-Ni functional materials: microcolumns, nanopillars and nanofoams

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** EDNANO-11

**PUBLICATION:**

**MEETING PLACE:** Balatönfured (Hungary)

**YEAR:** 2015

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**208- AUTHORS:** M.A. Zeeshan, D. Esqué-de los Ojos, P. Castro-Hartmann, M. Guerrero, J. Nogués, S. Suriñach, M.D. Baró, B.J. Nelson, S. Pané, E. Pellicer, [J. Sort](#)

**TITLE:** Dissimilar trends in the nanomechanical behavior of amorphous and crystalline metallic nanowires

**TYPE OF PRESENTATION:** Oral (highlighted)

**CONGRESS:** EUROMAT 2015

**PUBLICATION:**

**MEETING PLACE:** Warsaw (Poland)

**YEAR:** 2015

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**209- AUTHORS:** H.Y. Zhang, Y.P. Feng, Y.Y. Cheng, S. Suriñach, M.D. Baró, E. Pellicer, R. Li, T. Zhang, [J. Sort](#)

**TITLE:** Synthesis of  $Fe_{51}Mn_xCr_4Mo_{22-x}C_{15}B_6Er_2$  alloys with tunable microstructure and enhanced mechanical properties by injection casting and annealing treatments

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** EUROMAT 2015

**PUBLICATION:**

**MEETING PLACE:** Warsaw (Poland)

**YEAR:** 2015

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**210- AUTHORS:** N. Tsyntaru, S. Silkin, M. Guerrero, E. Pellicer, H. Cesiulis, [J. Sort](#)

**TITLE:** Template electrodeposition and magnetic properties of Co-W alloys

**TYPE OF PRESENTATION:** Poster

**CONGRESS:** 66th Annual ISE Meeting

**PUBLICATION:**

**MEETING PLACE:** Taiwan (China)

**YEAR:** 2015

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**211- AUTHORS:** G. Mulas, S. Garroni, E. Masolo, S. Enzo, F. Spanu, E. Tolu, M.D. Baró, E. Pellicer, [J. Sort](#)

**TITLE:** Nanosized systems supported on ordered mesoporous carbon as electrocatalysts for Oxygen Reduction Reaction in PEM fuel cells

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** E-MRS 2015 Fall Meeting

**PUBLICATION:**

**MEETING PLACE:** Strasbourg (Francia)

**YEAR:** 2015

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**212- AUTHORS:** B. Villarejo, C. Pop, S. Ricart, J. Sort, J. Fargas, P. Roura, X. Obradors, T. Puig  
**TITLE:** Pyrolysis study of thick deposited YBCO precursor layers by inkjet printing  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** 12th European Conference on Applied Superconductivity  
**PUBLICATION:**  
**MEETING PLACE:** Lyon (Francia)  
**YEAR:** 2015

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**213- AUTHORS:** J. Sort, J. Belzunce, A. Morán, J.M. Artime, M. Serrano, L. Sedano  
**TITLE:** Magnetic properties quantification of European RAFM steel ASTURFER  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** 28th Symposium on Fusion Technology (SOFT 2014)  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2015

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**214- AUTHORS:** B. Villarejo, C. Pop, S. Ricart, J. Sort, J. Fargas, P. Roura, X. Obradors, T. Puig  
**TITLE:** Pyrolysis study of thick deposited YBCO precursor layers by inkjet printing  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** 12th European Conference on Applied Superconductivity  
**PUBLICATION:**  
**MEETING PLACE:** Lyon (Francia)  
**YEAR:** 2015

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**215- AUTHORS:** J.Fornell, D.Bilican, P.Solsona, S.Suriñach, M.D.Baró, E.Pellicer, J.Sort  
**TITLE:** A novel approach for synthesis and characterization of synthesized Cu-Ni-Al shape memory thin films produced by electrodeposition with potential shape memory properties  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** TMS Annual Meeting & Exhibition 2016 – Bulk metallic glasses XIII session  
**PUBLICATION:**  
**MEETING PLACE:** Nashville, Tennessee  
**YEAR:** 2016

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**216- AUTHORS:** A. Quintana, A. Gómez, M. D. Baró, S. Suriñach, E. Pellicer, J. Sort  
**TITLE:** Piezoresponse and resistive switching in self-templating hierarchically porous single crystal ZnO nanowires  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2016  
**PUBLICATION:**  
**MEETING PLACE:** Nara City (Japan)  
**YEAR:** 2016

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**217- AUTHORS:** I. Golvano-Escobal, S. Suriñach, M. D. Baró, S. Pané, J. Sort, E. Pellicer  
**TITLE:** Multifunctional Fe-based electrodeposited nanomaterials  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2016  
**PUBLICATION:**  
**MEETING PLACE:** Nara City (Japan)

**YEAR:** 2016

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**218- AUTHORS:** J. Fornell, Y. P. Feng, A. Blanquer, H. Y. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, E. García-Lecina, L. Barrios, E. Pellicer, C. Nogués, [J. Sort](#)

**TITLE:** From bulk to porous Fe-based biocompatible alloys

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ISMANAM 2016

**PUBLICATION:**

**MEETING PLACE:** Nara City (Japan)

**YEAR:** 2016

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**219- AUTHORS:** P. Solsona, J. Fornell, Y. P. Feng, H. Y. Zhang, M. D. Baró, S. Suriñach, E. Pellicer, [J. Sort](#)

**TITLE:** Novel Biodegradable Fe-Mn-Si-Pd alloys with tunable pore size and porosity degree

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** ISMANAM 2016

**PUBLICATION:**

**MEETING PLACE:** Nara City (ISMANAM)

**YEAR:** 2016

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**220- AUTHORS:** J. Fan, M. Guerrero, S. Suriñach, M. D. Baró, [J. Sort](#), E. Pellicer

**TITLE:** Synthesis and potential applications of mesoporous Ni-doped SnO<sub>2</sub>: powders versus films

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Euromat Junior

**PUBLICATION:**

**MEETING PLACE:** Lausanne (Switzerland)

**YEAR:** 2016

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**221- AUTHORS:** J. Fan, A. Blanquer, J. Fornell, H. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, E. García-Lecina, L. Barrios, E. Pellicer, C. Nogués, [J. Sort](#)

**TITLE:** Novel Fe-Mn-Si-Pd biocompatible alloys: mechanical, magnetic and corrosion performance

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Euromat Junior

**PUBLICATION:**

**MEETING PLACE:** Lausanne (Switzerland)

**YEAR:** 2016

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**222- AUTHORS:** C.E. Moyano-Cambero, J.M. Trigo-Rodríguez, E. Pellicer, J. Llorca, M. Martínez-Jiménez, [J. Sort](#)

**TITLE:** Uv-Nir Spectra and Nanoindentation of Chelyabinsk to Infer the Mechanical Properties of Hazardous Asteroids

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 79th Annual Meeting of the Meteoritical Society

**PUBLICATION:**

**MEETING PLACE:** Berlin (Germany)

**YEAR:** 2016

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**223- AUTHORS:** I. Fina, J. Clarkson, C. Frontera, K. Cordero, S. Wizotsky, A. Quintana, F. Sanchez, J. Sort, R. Ramesh, X. Marti, J. Fontcuberta  
**TITLE:** Antiferromagnetic-Ferromagnetic mixed phase system with thermal and electric encrypted magnetic memory performance  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 2016 Joint IEEE ISAF - ECAPD - PFM  
**PUBLICATION:**  
**MEETING PLACE:** Darmstadt (Germany)  
**YEAR:** 2016

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**224- AUTHORS:** Y. P. Feng, A. Blanquer, J. Fornell, H. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, E. García-Lecina, X. Wei, R. Li, L. Barrios, E. Pellicer, C. Nogués, J. Sort  
**TITLE:** Osteoblast behaviour onto novel biodegradable Fe-10Mn6Si1Pd and Fe-30Mn6Si1Pd alloys  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** APA International Conference on Advanced Polymers, Biomaterials, Bioengineering and Nano Drug Delivery  
**PUBLICATION:**  
**MEETING PLACE:** Flic-en-Flac (Mauritania)  
**YEAR:** 2016

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**225- AUTHORS:** A. Nicolenco, N. Tsyntsaru, E. Pellicer, J. Fornell, H. Cesiulis, J. Sort  
**TITLE:** Magnetic and mechanical properties of electrodeposited Fe-W alloys  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** The 8th International Conference Materials Science and Condensed Matter Physics  
**PUBLICATION:**  
**MEETING PLACE:** Chisinau (Moldova)  
**YEAR:** 2016

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**226- AUTHORS:** S. Zsuzsa, I. Bakonyi, L. Péter, E. Pellicer, J. Sort, E. Pellicer  
**TITLE:** Structural investigation of Ni-Co/Cu multilayered nanowires  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 2nd e-Minds COST Action Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Athens (Greece)  
**YEAR:** 2016

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**227- AUTHORS:** A. Quintana, J. Zhang, A. Varea, S. Pané, E. Pellicer, J. Sort  
**TITLE:** Highly-tunable magnetic properties in novel  $\text{Cu}_{1-x}\text{Ni}_x$  architectures: from fully dense films to patterned pillars and micro-/nanoporous structures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 61st Annual Conference on Magnetism and Magnetic Materials (2016 MMM)  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans (United States of America)  
**YEAR:** 2016

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**228- AUTHORS:** Y.P. Feng, N. Gaztelumendi, J. Fornell, H. Y. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, E. García-Lecina, L. Barrios, E. Pellicer, C. Nogués, J. Sort

**TITLE:** Novel Fe-Mn-Si-Pd dense and porous alloys: insights on mechanical, magnetic and corrosion performance

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** NanoBioMed 2016

**PUBLICATION:**

**MEETING PLACE:** Barcelona (Spain)

**YEAR:** 2016

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**229- AUTHORS:** A. Quintana, A. Varea, M. Guerrero, S. Suriñach, M.D. Baró, J. Sort, E. Pellicer

**TITLE:** Electrodeposited molybdenum oxide films and patterned submicrometer motifs: structure and mechanical properties

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** THERMEC 2016

**PUBLICATION:**

**MEETING PLACE:** Graz (Austria)

**YEAR:** 2016

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**230- AUTHORS:** A. Serrà, S. Grau, C. Gimbert-Suriñach, J. Sort, J. Nogués, E. Vallés

**TITLE:** Magnetically-actuated mesoporous CoPt nanowires as a means to revolutionize heterogeneous catalysis for both water remediation and hydrogen production

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** IN2UB 10th Anniversary

**PUBLICATION:**

**MEETING PLACE:** Barcelona (Spain)

**YEAR:** 2017

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**231- AUTHORS:** V.Guccini, D.Laurencin, F. Ansari, J. Sort, N. Hedin, L. A. Berglund, G. Salazar-Alvarez

**TITLE:** Protective transparent coatings composed of cellulose nanofibers cross-linked with borate ions

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 5th International Conference on Multifunctional, Hybrid and Nanomaterials (HYMA 2017)

**PUBLICATION:**

**MEETING PLACE:** Lisbon (Portugal)

**YEAR:** 2017

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**232- AUTHORS:** H. Zhang, S. Robbenolt, A. Quintana, A. Gordó, E. Menéndez, J. Fornell, E. Pellicer, J. Sort

**TITLE:** Structural and magnetic properties of ribbons and thin films of  $\text{Fe}_x\text{Cu}_{1-x}$  electrochemically treated to create 3D nanoporosity

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Intermag 2017

**PUBLICATION:**

**MEETING PLACE:** Dublin (Ireland)

**YEAR:** 2017

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**233- AUTHORS:** V. Sireus, A. Quintana, E. Menéndez, S. Suriñach, M. D. Baró, J. Sort

**TITLE:** Voltage-controlled magnetism in Fe<sub>60</sub>Al<sub>40</sub> (at. %)/(100) PMN-PT multiferroic heterostructures

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** 3rd Scientific Meeting of BNC-b Students / Bellaterra

**PUBLICATION:**

**MEETING PLACE:** Bellaterra (Spain)

**YEAR:** 2017

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**234 AUTHORS:** A. Serrà, S. Grau, C. Gimbert-Suriñach, J. Sort, J. Nogués, E. Vallés

**TITLE:** Drastic enhancement of the catalytic activity of both water remediation and hydrogen production using magnetically actuated mesoporous CoPt nanowires

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** 10th World Congress of Chemical Engineering

**PUBLICATION:**

**MEETING PLACE:** Barcelona (Spain)

**YEAR:** 2017

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**235- AUTHORS:** C. Navarro-Senent, J. Fornell, E. Isarain-Chavez, A. Quintana, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Magnetic properties of nanoporous Co-Pt micropatterns synthesized by electrodeposition process

**TYPE OF PRESENTATION:** POSTER (1<sup>st</sup> Prize Poster Award)

**CONGRESS:** 3rd Scientific Meeting of BNC-b Students / Bellaterra

**PUBLICATION:**

**MEETING PLACE:** Bellaterra (Spain)

**YEAR:** 2017

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**236- AUTHORS:** D. Bilican, S. Kurdi, Y. Zhu, J. Fornell, E. Pellicer, L. Greer, Z. Barber, J. Sort

**TITLE:** Effects of Post- and In-situ Heat Treatments on Sputtered Copper-Aluminium-Nickel Shape Memory Alloys Thin Films

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** 3rd Scientific Meeting of BNC-b Students / Bellaterra

**PUBLICATION:**

**MEETING PLACE:** Bellaterra (Spain)

**YEAR:** 2017

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**237- AUTHORS:** E. Dislaki, F. Celegato, P. Tiberto, J. Sort, E. Pellicer

**TITLE:** Fabrication and properties of electroplated Fe-Cu continuous films and porous microstructures deposited onto e-beam lithographed patterns

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Euromat 2017

**PUBLICATION:**

**MEETING PLACE:** Thessaloniki (Greece)

**YEAR:** 2017

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**238- AUTHORS:** P. Solsona, Y. P. Feng, J. Fornell, M. D. Baró, S. Suriñach, E. Pellicer, J. Sort

**TITLE:** Tuning the magnetic behavior of ultralight Fe-oxide foams by Mn addition

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Euromat 2017

**PUBLICATION:**  
**MEETING PLACE:** Thessaloniki (Greece)  
**YEAR:** 2017

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**239- AUTHORS:** J. Fornell, Y. P. Feng, N. Gaztelumendi, H. Y. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Ibáñez, L. Barrios, E. Pellicer, C. Nogués, J. Sort  
**TITLE:** Study on the corrosion, mechanical and cell viability behaviour of newly developed porous Fe-Mn-Si-Pd alloys  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2017  
**PUBLICATION:**  
**MEETING PLACE:** Thessaloniki (Greece)  
**YEAR:** 2017

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**240- AUTHORS:** J. Soriano, J. Fornell, M. Guerrero, J. de Dios Sirvent, M. Ferran, E. Ibáñez, L. Barrios, M. D. Baró, S. Suriñach, J. Sort, E. Pellicer, C. Nogués  
**TITLE:** Development of FeMn-Coated Polypropylene Membranes as Micro-Robotic Platforms for Drug Delivery Applications  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 28th European Conference on Biomaterials  
**PUBLICATION:**  
**MEETING PLACE:** Athens (Greece)  
**YEAR:** 2017

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**241- AUTHORS:** N. Gaztelumendi, Y. P. Feng, J. Fornell, H. Zhang, P. Solsona, M. D. Baró, S. Suriñach, E. Pellicer, J. Sort, E. Ibáñez, L. Barrios, C. Nogués  
**TITLE:** Cytotoxicity of New Biodegradable Bulk and Porous Fe-Mn-Si-Pd Alloys  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 28th Annual Conference of the European Society for Biomaterials  
**PUBLICATION:**  
**MEETING PLACE:** Athens (Greece)  
**YEAR:** 2017

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**242- AUTHORS:** A. Salicio-Paz, H. Grande, E. Pellicer, J. Sort, E. García-Lecina  
**TITLE:** Corrosion resistance, mechanical and tribological properties of electroless NiP multilayered coatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Joint EUROCORR 2017 & 20th ICC congress  
**PUBLICATION:**  
**MEETING PLACE:** Prague (Czech Republic)  
**YEAR:** 2017

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**243- AUTHORS:** I. Fina, A. Quintana, F. Sánchez, F. Macià, J. Padilla-Pantoja, M. Foerster, L. Aballe, J. Sort, J. Fontcuberta  
**TITLE:** Magnetic memory effect in Antiferromagnetic-Ferromagnetic martensitic alloy  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XXXVI Reunión Bienal de la Real Sociedad Española de Física  
**PUBLICATION:**  
**MEETING PLACE:** Santiago de Compostela (Spain)  
**YEAR:** 2017

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**244- AUTHORS:** D. Bilican, J. Fornell, J. Sort, E. Pellicer  
**TITLE:** Electrochemical Synthesis of Micron and Submicron-Sized Bismuth Particles with Tunable Morphology onto Various Substrates  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 13th International Conference on Materials Chemistry (MC13)  
**PUBLICATION:**  
**MEETING PLACE:** Liverpool (United Kingdom)  
**YEAR:** 2017

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**245- AUTHORS:** D. Bilican, E. Menendez, J. Zhang, P. Solsona, J. Fornell, E. Pellicer, J. Sort  
**TITLE:** Synthesis of Bismuth Ferrite by Electrodeposition Followed by Heat Treatment  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 13th International Conference on Materials Chemistry (MC13)  
**PUBLICATION:**  
**MEETING PLACE:** Liverpool (United Kingdom)  
**YEAR:** 2017

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**246- AUTHORS:** D. Bilican, E. Menéndez, J. Zhang, P. Solsona, J. Fornell, E. Pellicer, J. Sort  
**TITLE:** Synthesis of Porous BiFeO<sub>3</sub> films with Ferromagnetic-like Behaviour by Electrodeposition followed by Heat Treatment  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Plasmas, Surfaces and Thin Films: Early Career Researchers Meeting (IOP Events)  
**PUBLICATION:**  
**MEETING PLACE:** Leicestershire (United Kingdom)  
**YEAR:** 2017

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**247- AUTHORS:** E. J. Garcia-Suarez, C. Herlev-Gebara, S.G. Khokarale, S. Shunmugavel, M. Guerrero, J. Sort, A. Riisager  
**TITLE:** Methylpropionate synthesis from biomass-derived feedstocks with supported metal oxide catalysts  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** XXXVI Reunión BIENAL de la Real Sociedad Española de QUÍMICA  
**PUBLICATION:**  
**MEETING PLACE:** Sitges (Spain)  
**YEAR:** 2017

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**248- AUTHORS:** F. Tan, M. Y. Tsang, S. Rodríguez-Hermida, K. C. Stylianou, D. Negi, F. Teixidor, C. Viñas, D. Choquesillo-Lazarte, C. Verdugo-Escamilla, M. Guerrero, J. Sort, J. Juanhuix, I. Imaz, D. Maspoch, J. Giner Planas  
**TITLE:** Carborane bis-pyridylalcohols as linkers for coordination polymers: synthesis, crystal structures and guest-framework dependent mechanical properties  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** XXXVI Reunión BIENAL de la Real Sociedad Española de QUÍMICA  
**PUBLICATION:**  
**MEETING PLACE:** Sitges (Spain)  
**YEAR:** 2017

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**249- AUTHORS:** C. Nogués, A. Aranda-Ramos, Z. Li, L. Pou-Macayo, J. Sort, J. Nogués, B. Sepulveda  
**TITLE:** Magneto-plasmonic nanodomains for photo-thermal treatments  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Nanobiomed  
**PUBLICATION:**  
**MEETING PLACE:** Alghero (Italy)  
**YEAR:** 2017

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**250- AUTHORS:** H. Zhang, Y.P. Feng, Y. Cheng, M.D. Baró, A. Altube, E. García-Lecina, F. Alcaide, E. Pellicer, T. Zhang, J. Sort  
**TITLE:** Nanoporous Fe-Based Alloy Prepared by Selective Dissolution: An Effective Fenton Catalyst for Water Remediation  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** ISMANAM 2017  
**PUBLICATION:**  
**MEETING PLACE:** Donostia (Spain)  
**YEAR:** 2017

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**251- AUTHORS:** I. Fina, A. Quintana, F. Sánchez, J. Sort, X. Martí, J. Fontcuberta  
**TITLE:** Electrically driven magnetic memory effect in Antiferromagnetic-Ferromagnetic mixed phase system  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** E-MRS 2017  
**PUBLICATION:**  
**MEETING PLACE:** Strassbourg (France)  
**YEAR:** 2017

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**252- AUTHORS:** E. Dislaki, J. Sort, E. Pellicer  
**TITLE:** Synthesis and analysis of electroplated FeCu: from continuous to hierarchically porous films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** E-MRS 2017  
**PUBLICATION:**  
**MEETING PLACE:** Strassbourg (France)  
**YEAR:** 2017

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**253- AUTHORS:** S. Zsurzsa, I. Bakonyi, L. Péter, J. Sort, E. Pellicer  
**TITLE:** Electron microscopy analysis and magnetic characterization of Ni-Co/Cu multilayered nanowires grown in AAO membranes  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EDNANO 12  
**PUBLICATION:**  
**MEETING PLACE:** Sofia (Bulgaria)  
**YEAR:** 2017

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**254- AUTHORS:** A. Serrà, S. Grau, C. Gimbert-Suriñach, J. Sort, J. Nogués, E. Vallés

**TITLE:** Magnetically-actuated mesoporous CoPt nanowires as a means to revolutionize heterogeneous catalysis for both water remediation and hydrogen production

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** RSC Twitter Poster Conference 2017

**PUBLICATION:**

**MEETING PLACE:** on-line

**YEAR:** 2017

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**255- AUTHORS:** S. Thirumalai, E. Pellicer, J. Sort, A. L. Greer

**TITLE:** Electrodeposition of iron-based nanocomposite coatings

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** EDNANO 12

**PUBLICATION:**

**MEETING PLACE:** Sofia (Bulgaria)

**YEAR:** 2017

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**256- AUTHORS:** S. Danilova, P. Solsona, J.E. Graves, E. Pellicer, J. Sort, A.J. Cobley

**TITLE:** The preparation of nanocomposite Iron Oxide-Silver particles by ball-milling

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** International Conference on PROCESSING & MANUFACTURING OF ADVANCED MATERIALS (Thermec 2018)

**PUBLICATION:**

**MEETING PLACE:** Paris (France)

**YEAR:** 2018

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**257- AUTHORS:** C. Navarro-Senent, J. Fornell, E. Isarain-Chávez, A. Quintana, J. Nogués, E. Pellicer, J. Sort

**TITLE:** Electric-field effect on the magnetic properties of nanoporous Co-Pt patterned microstructures

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** International Conference on PROCESSING & MANUFACTURING OF ADVANCED MATERIALS (Thermec 2018)

**PUBLICATION:**

**MEETING PLACE:** Paris (France)

**YEAR:** 2018

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**258- AUTHORS:** S. Danilova, J. E. Graves, E. Pellicer, J. Sort, A. J. Cobley

**TITLE:** Selective Metalization of Non-Conductive Materials By Macropatterning of Catalytic Particles and the Application of a Gradient Magnetic Field

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** The Electrochemical Society, Advancing solid State and Electrochemical Science and Technology: 233<sup>rd</sup> ECS Meeting

**PUBLICATION:**

**MEETING PLACE:** Seattle (USA)

**YEAR:** 2018

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**259- AUTHORS:** M. Ferran, J. Fornell, J. Soriano, M. Guerrero, J. de Dios Sirvent, E. Ibáñez, L. Barrios, C. Nogués, J. Sort, E. Pellicer

**TITLE:** Development of FeMnSi-coated polypropylene membranes as potential micro-robotic platforms for drug delivery applications

**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 2<sup>nd</sup> World summit on Nanotechnology and Nanomedicine Research  
**PUBLICATION:**  
**MEETING PLACE:** Oxford (United Kingdom)  
**YEAR:** 2018

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**260- AUTHORS:** M. Cialone, E. Dislaki, F. Celegato, M. Coisson, G. Barrera, E. Pellicer, J. Sort, P. Rizzi, P. Tiberto  
**TITLE:** Magnetization reversal in electrodeposited FePd sub-micron structures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 9<sup>th</sup> Joint European Magnetic Symposia (JEMS)  
**PUBLICATION:**  
**MEETING PLACE:** Mainz (Germany)  
**YEAR:** 2018

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**261- AUTHORS:** E. Dislaki, M. Cialone, F. Celegato, P. Tiberto, J. Sort, E. Pellicer  
**TITLE:** Unravelling the magnetic properties of Fe–Cu electrodeposited films and patterned submicron pillars  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 9<sup>th</sup> Joint European Magnetic Symposia (JEMS)  
**PUBLICATION:**  
**MEETING PLACE:** Mainz (Germany)  
**YEAR:** 2018

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**262- AUTHORS:** E. Bertero, C. V. Manzano, E. Pellicer, J. Sort, M. Doebeli, S. Mischler, J. Michler, L. Philippe  
**TITLE:** Electrodeposited FeCrNi stainless steel-like films: influence of impurities and microstructure on corrosion resistance  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EUROCORR 2018  
**PUBLICATION:**  
**MEETING PLACE:** Krakow (Poland)  
**YEAR:** 2018

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**263- AUTHORS:** E. Garcia-Lecina, A. Salicio-Paz, H.-J. Grande, V. Martínez-Nogués, E. Pellicer, J. Sort, R. Offoich, M. Lekka  
**TITLE:** Corrosion resistance and tribo-corrosion behaviour of electroless NiP multilayered coatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EUROCORR 2018  
**PUBLICATION:**  
**MEETING PLACE:** Krakow (Poland)  
**YEAR:** 2018

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**264- AUTHORS:** C. Navarro-Senent, J. Fornell, E. Isarain-Chávez, A. Quintanaa, J. Nogués, E. Pellicer, J. Sort  
**TITLE:** Magneto-electric properties of nanoporous Co-Pt dots synthesized by micelle-assisted electrodeposition on lithographed substrates  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 32<sup>nd</sup> International Conference on Surface Modification Technologies (SMT32)

**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2018

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**265- AUTHORS:** A. Salicio-Paz, H. Grande, E. Pellicer, J. Sort, M. Lekka, R. Offoiach, E. García-Lecina  
**TITLE:** Effect of annealing on the mechanical properties and corrosion resistance of multilayered electroless coatings  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 32<sup>nd</sup> International Conference on Surface Modification Technologies (SMT32)  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2018

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**266- AUTHORS:** A. Nicolenco, N. Imaz, A. Salicio, N. Tsyntaru, E. Pellicer, J. Sort, H. Cesiulis, E. García-Lecina  
**TITLE:** Effect of alumina sub-microparticles on the mechanical, corrosion and tribological properties of electrodeposited Fe-W composite coatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 32<sup>nd</sup> International Conference on Surface Modification Technologies (SMT32)  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian (Spain)  
**YEAR:** 2018

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**267- AUTHORS:** D. Bilican, S. Kurdi, Y. Zhu, P. Solsona, E. Pellicer, Z. Barber, L. A. Greer, J. Sort, J. Fornell  
**TITLE:** Epitaxial versus polycrystalline shape memory CuAlNi thin films  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** ISMANAM 2018  
**PUBLICATION:**  
**MEETING PLACE:** Rome (Italy)  
**YEAR:** 2018

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**268- AUTHORS:** S. Tanbakouei, J.M. Trigo-Rodríguez, J. Sort  
**TITLE:** Physical Properties of Silicate-Rich Regolith Particles from Itokawa Asteroid  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Hayabusa 2018  
**PUBLICATION:**  
**MEETING PLACE:** Kanagawa (Japan)  
**YEAR:** 2018

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**269- AUTHORS:** M. Fernández-Barcia, B. Jang, C. Alcántara, M. Uhlemann, U. Wolff, A. Gebert, J. Sort, E. Pellicer, S. Pané  
**TITLE:** Magnetic control over compositionally graded Fe-Mn oxide based catalytic micromotors prepared by electrodeposition  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 13<sup>th</sup> International Workshop on Electrodeposited Nanostructures  
**PUBLICATION:**  
**MEETING PLACE:** Brisol (UK)  
**YEAR:** 2018

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**270- AUTHORS:** S. Scudino, J. Bian, H.S. Shahabi, D. Söpu, J. Sort, J. Eckert, G. Liu  
**TITLE:** Enhancing the tensile ductility of bulk metallic glasses by designing structural heterogeneities  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ISMANAM 2018  
**PUBLICATION:**  
**MEETING PLACE:** Rome (Italy)  
**YEAR:** 2018

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**271- AUTHORS:** Z. Li, A. Lopez-Ortega, A. Aranda-Ramos, J.L. Tajada, J. Sort, C. Nogués, P. Varvasori, J. Nogués, B. Sepúlveda  
**TITLE:** Simultaneous local heating/thermometry based on plasmonic magneto-chromic nanodomains  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EMN (Energy Materials and Nanotechnology) Meeting  
**PUBLICATION:**  
**MEETING PLACE:** Rome (Italy)  
**YEAR:** 2018

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**272- AUTHORS:** C. Navarro Senent, A. Quintana, E. Isarain Chávez, E. Weschke, P. Yu, M. Coll, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Boosting Magneto-Ionic Effects in Magnetic Mesoporous Films through Conformal Oxygen Getter/donor Nanocoatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 64th Annual Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Las Vegas (USA)  
**YEAR:** 2019

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**273- AUTHORS:** S. Robbenolt, A. Nicolenco, P.M. Fernandez, S. Aufftet, V. Baltz, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Large Magneto-electric Effect in Nanoporous Iron Oxide Thin Films Driven by Magneto-ionics  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 64th Annual Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Las Vegas (USA)  
**YEAR:** 2019

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**274- AUTHORS:** V. Sireus, E. Menéndez, A. Quintana, I. Fina, B. Casals, R. Cichelero, M. Kataja, M. Stengel, G. Herranz, G. Catalán, M. D. Baró, S. Suriñach, J. Sort  
**TITLE:** Voltage Control of Magnetism in Fe<sub>75</sub>Al<sub>25</sub>/PMN-32 PT Multiferroic Heterostructures  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 64th Annual Conference on Magnetism and Magnetic Materials  
**PUBLICATION:**  
**MEETING PLACE:** Las Vegas (USA)  
**YEAR:** 2019

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**275- AUTHORS:** A. Quintana Puebla, E. Menendez, M. Liedke, M. Butterling, A. Wagner, V. Sireus, P. Torruella, S. Estradé, F. Peiró, J. Dendooven, C. Detavernier, P. Murray, D. Gilbert, E. Pellicer, J. Nogues, J. Sort, K. Liu  
**TITLE:** Room-Temperature Electric Field Controlled On-Off Ferromagnetism in a Single Metal Oxide Film  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 2019 Joint MMM-Intermag Conference  
**PUBLICATION:**  
**MEETING PLACE:** Washington (USA)  
**YEAR:** 2019

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**276- AUTHORS:** A. Salicio-Paz., H. Grande, A. Dalmau, V. Martinez-Nogues, E. Pellicer, J. Sort, R. Offoach, M. Lekka, E. García-Lecina  
**TITLE:** Microstructure, mechanical properties and tribo-corrosion behavior of electroless Ni-P functional multilayers  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Eurocorr 2019  
**PUBLICATION:**  
**MEETING PLACE:** Seville (Spain)  
**YEAR:** 2019

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**277- AUTHORS:** K. Eiler, H. Krawiec, I. Kozina, J. Sort, E. Pellicer  
**TITLE:** Effects of the composition and structure of mesoporous Ni-Pt films on their corrosion behaviour in acidic media used for hydrogen evolution reaction  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Eurocorr 2019  
**PUBLICATION:**  
**MEETING PLACE:** Seville (Spain)  
**YEAR:** 2019

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**278- AUTHORS:** K. Eiler, J. Sort, E. Pellicer  
**TITLE:** Electrochemical synthesis of magnetic mesoporous Ni-Pt alloy thin films for hydrogen evolution reaction  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Electrochem 2019  
**PUBLICATION:**  
**MEETING PLACE:** Strathclyde (UK)  
**YEAR:** 2019

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**279- AUTHORS:** S. Robbennolt, P. Mercier Fernandez, A. Nicolenco, E. Pellicer, J. Sort  
**TITLE:** Reversible, electric-field induced magneto-ionic control of magnetism in mesoporous cobalt ferrite thin films  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 62<sup>nd</sup> International Conference for students of physics and natural sciences  
**PUBLICATION:**  
**MEETING PLACE:** Vilnius (Lithuania)  
**YEAR:** 2019

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**280- AUTHORS:** M. Vainoris, N. Tsyntaru, E. Podlaha-Murphy, J. Sort, H. Cesiulis  
**TITLE:** Fabrication of porous Co-Pt nanowires and their magnetic applications

**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Open Readings  
**PUBLICATION:**  
**MEETING PLACE:** Vilnius (Lithuania)  
**YEAR:** 2019

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**281- AUTHORS:** M. O. Liedke, M. Butterling, A. Quintana, E. Menéndez, E. Hirschmann, A. G. Attallah, V. Sireus, J. Nogués, J. Sort, A. Wagner  
**TITLE:** Defect mediated ON-OFF ferromagnetism in electrical field controlled metal oxide films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** EMRS Fall Meeting 2019  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw (Poland)  
**YEAR:** 2019

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**282- AUTHORS:** S. Robbenolt, P. Mercier-Fernández, A. Nicolenco, E. Pellicer, J. Sort  
**TITLE:** Magneto-Ionic Control of Magnetism in Nanoporous CoFe<sub>2</sub>O<sub>4</sub> Thin Films Prepared by Evaporation-Induced Self-Assembly  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** SMT33  
**PUBLICATION:**  
**MEETING PLACE:** Naples (Italy)  
**YEAR:** 2019

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**283- AUTHORS:** E. Bertero, H. Madoka, C. V. Manzano, E. Pellicer, J. Sort, I. K. Hermann, R. M. Robert, S. Mischler, J. Michler, L. Philippe  
**TITLE:** Electrodeposited FeCrNi stainless steel-like films from a “green” Cr(III)-based electrolyte: material properties overview and investigation of impurities’ incorporation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** SMT33  
**PUBLICATION:**  
**MEETING PLACE:** Naples (Italy)  
**YEAR:** 2019

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**284- AUTHORS:** M. Vainoris, N. Tsyntaru, E. Podlaha-Murphy, J. Sort, H. Cesiulis  
**TITLE:** Template assisted electrodeposited porous Co-Pt nanowires and their magnetic properties  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** SMT33  
**PUBLICATION:**  
**MEETING PLACE:** Naples (Italy)  
**YEAR:** 2019

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**285- AUTHORS:** O. Careta, A. Salicio-Paz, E. García-Lecina, J. Fornell, E. Pellicer, J. Sort, C. Nogués, E. Ibáñez, L. Barrios  
**TITLE:** Assessment of Pd foam biocompatibility for electrical stimulation experiments  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Jornadas Bio UAB  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra (Spain)

**YEAR:** 2019

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**286- AUTHORS:** K. Cordero-Edwards, H. Kianirad, C. Canalias, J. Sort, G. Catalan

**TITLE:** Ferroelectric fracture ratchet effect caused by flexoelectricity

**TYPE OF PRESENTATION:**

**CONGRESS:** F2CP2 2019 Joint Conference

**PUBLICATION:**

**MEETING PLACE:** Lausanne (Switzerland)

**YEAR:** 2019

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**287- AUTHORS:** M. O. Liedke, M. Butterling, A. Quintana, E. Menéndez, E. Hirschmann, A. G. Attallah, V. Sireus, J. Nogués, J. Sort, A. Wagner

**TITLE:** Electrical field-controlled ON-OFF ferromagnetism in metal oxide films

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** SLOPOS-15

**PUBLICATION:**

**MEETING PLACE:** Prague

**YEAR:** 2019

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**288- AUTHORS:** J. de Rojas, E. Menéndez, A. Lopeandía, L. Abad, M. O. Liedke, M. Butterling, A. Wagner, L. Henderick, J. Dendooven, C. Detavernier, J. Sort

**TITLE:** Role of the electrical properties of substrates in the magneto-ionic behavior of  $\text{Co}_3\text{O}_4$  thin films

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Heraeus Seminars

**PUBLICATION:**

**MEETING PLACE:** Bad Honnef (Germany)

**YEAR:** 2020

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**289- AUTHORS:** C. Navarro-Senent, A. Quintana, E. Isarain-Chávez, E. Weschke, P. Yu, M. Coll, E. Pellicer, E. Menéndez, J. Sort

**TITLE:** Magneto-ionic effects in magnetic mesoporous films through  $\text{HfO}_2$  and  $\text{Al}_2\text{O}_3$  conformal nanocoatings

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Heraeus Seminars

**PUBLICATION:**

**MEETING PLACE:** Bad Honnef (Germany)

**YEAR:** 2020

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**290- AUTHORS:** V. Sireus, E. Menéndez, A. Quintana, I. Fina, B. Casals, R. Cichelero, M. Kataja, M. Stengel, G. Herranz, G. Catalán, M. D. Baró, S. Suriñach, J. Sort

**TITLE:** Disentangling Highly Asymmetric Magnetoelectric Effects in Engineered Multiferroic Heterostructures

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** Heraeus Seminars

**PUBLICATION:**

**MEETING PLACE:** Bad Honnef (Germany)

**YEAR:** 2020

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**291- AUTHORS:** S. Danilova, J. E. Graves, G. V.W. Cave, J. Sort, E. Pellicer, A. J. Cobley  
**TITLE:** Selective electroless plating on non-conductive materials by applying a gradient magnetic field  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** SPIE Novel Patterning Technologies for Semiconductors MEMS\_NEMS and MOEMS 2020  
**PUBLICATION:**  
**MEETING PLACE:** San Jose (USA)  
**YEAR:** 2020

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**292- AUTHORS:** A. Nicolenco, S. Robbenolt, M. Cialone, G. Rius, E. Menéndez, J. Sort  
**TITLE:** Electric-field Induced Magneto-ionic Control of Magnetism in Highly Porous Iron Oxide Films and Nanostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** CIMTEC 2020  
**PUBLICATION:**  
**MEETING PLACE:** Montecatini (Italy)  
**YEAR:** 2020

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**293- AUTHORS:** J. Fornell, C. Navarro-Senent, S. Suriñach, M. D. Baró, E. Pellicer, H. Torlakcik, X.-Z. Chen, S. Pané, J. Sort  
**TITLE:** Patterned magnetoelectric FeGa/ZnO composite thin films intended for biomedical applications  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Thermec 2020  
**PUBLICATION:**  
**MEETING PLACE:** Graz (Austria)  
**YEAR:** 2020

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**294- AUTHORS:** M. Cialone, C. Navarro-Senent, G. Rius, E. Pellicer, J. Sort  
**TITLE:** Magnetoelectric effects in nanoporous CoPt microstructures  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Heraeus Seminars  
**PUBLICATION:**  
**MEETING PLACE:** Bad Honnef (Germany)  
**YEAR:** 2020

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**295- AUTHORS:** O. Careta, G. Murillo, J. Fornells, A. Blanquer, E. Ibáñez, J. Esteve, E. Pellicer, J. Sort, C. Nogués  
**TITLE:** Osteoblasts electrical stimulation with nanogenerators build on top of a Ti-based alloy  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** WBC 2020  
**PUBLICATION:**  
**MEETING PLACE:** Glasgow (UK)  
**YEAR:** 2020

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**296- AUTHORS:** N. Domingo, A. Abdollahi, K. Cordero-Eduards, J. Sort, I. Arias, G. Catalan  
**TITLE:** Direct and converse flexoelectricity: the effect of strain and electric field gradients on nanoscale electromechanical responses  
**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** APS March Meeting 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**297- AUTHORS:** K. Eiler, E. García-Lecina, L. Mølmen, L. Fast, J. Sort and E. Pellicer  
**TITLE:** Endurance of electrocatalytic mesoporous Ni-Pt particles supported on three-dimensional C and Ni substrates  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Eurocorr 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**298- AUTHORS:** A. Salicio, A. Dalmau, H. Grande, E. Pellicer, J. Sort, E. García-Lecina  
**TITLE:** Unravelling the tribocorrosion performance of low-P electroless nickel multilayers under cathodic protection  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Eurocorr 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**299- AUTHORS:** M. Cialone, S. Robbenolt, E. Menéndez, A. Nicolenco, G. Rius, J. Sort  
**TITLE:** Control of magnetism in porous iron oxide films and nanostructures via electric field magneto-ionic effect  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JEMS 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**300- AUTHORS:** S. Martins, J. Salguero, J. de Rojas, G. Rius, J. Costa-Kramer, E. Menéndez, J. Sort  
**TITLE:** Thickness dependence of magneto-ionic effects in  $\text{Co}_3\text{O}_4$  films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JEMS 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**301- AUTHORS:** K. Eiler, L. Molmen, L. Fast, P. Leisner, J. Sort, E. Pellicer  
**TITLE:** Nanoscale Ni-Mo-Pt alloy catalyst with tuneable composition for hydrogen economy: electrosynthesis and characterisation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** PRIME 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**302- AUTHORS:** A. Nicolenco, N. Tsyntaru, H. Cesiulis, E. Pellicer, J. Sort  
**TITLE:** Nanoporous Fe-Ga alloys with magnetoelectric capabilities  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ECRES 2020  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2020

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**303- AUTHORS:** O. Careta, A. Salicio-Paz, E. Pellicer, E. Ibáñez, J. Fornell, E. García-Lecina, J. Sort, C. Nogués  
**TITLE:** Electrical Stimulation of Osteoblast-Like Saos-2 Cells using electroless Palladium-Coated Polymer Scaffolds  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 31st Conference of the European Society for Biomaterials  
**PUBLICATION:**  
**MEETING PLACE:** Porto (Portugal)  
**YEAR:** 2021

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**304- AUTHORS:** J. de Rojas, A. Quintana, A. Lopeandia, J. Salguero, B. Muñiz, F. Ibrahim, M. Chshiev, A. Nicolenco, M. Liedke, M. Butterling, A. Wagner, L. Henderick, J. Dendooven, C. Detavernier, V. Sireus, L. Abad, C. Jensen, K. Liu, J. Nogués, J. L. Costa-Krämer, E. Menéndez, J. Sort  
**TITLE:** Oxygen vs. Nitrogen Magneto-Ionics  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Intermag 2021 / virtual  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**305- AUTHORS:** J. de Rojas, A. Quintana, A. Lopeandia, J. Salguero, F. Ibrahim, M. Chshiev, M.O. Liedke, M. Butterling, A. Wagner, L. Abad, C. Jensen, K. Liu, J. L. Costa-Krämer, E. Menéndez, J. Sort  
**TITLE:** Nitrogen magneto-ionics  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Materials Challenges for Memory 2021 / American Institute of Physics (AIP, APL Mater.)  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**306- AUTHORS:** A. Nicolenco, M. Cialone, S. Robbenolt, E. Menéndez, G. Rius, J. Sort  
**TITLE:** Electric-field control of magnetism in arrays of nanoporous iron oxide microdisks  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Materials Challenges for Memory 2021 / American Institute of Physics (AIP, APL Mater.)  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**307- AUTHORS:** E. Menéndez, J. de Rojas, A. Quintana, J. Sort  
**TITLE:** ON-OFF magneto-ionics in  $\text{Co}_3\text{O}_4$   
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Materials Challenges for Memory 2021 / American Institute of Physics (AIP, APL Mater.)  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**308- AUTHORS:** K. Eiler, L. Mølmen, L. Fast, P. Leisner, J. Sort, E. Pellicer  
**TITLE:** Electrodeposited electrocatalysts for hydrogen energy  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Final mcBEEs Workshop  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2021

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**309- AUTHORS:** J.M.A. Escobar Hernández, J. Sort, E. Pellicer  
**TITLE:** Electrodeposition and characterization of hydroxyapatite/silver nanoparticles composite coatings on newly developed  $\beta$ -type TiMoNbTa alloy  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Euromat 2021  
**PUBLICATION:**  
**MEETING PLACE:** Graz (Austria), online  
**YEAR:** 2021

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**310- AUTHORS:** M. Cialone, A. Nicolenco, S. Robbenolt, E. Menéndez, G. Rius, J. Sort  
**TITLE:** Voltage-induced ON switching of magnetism in ordered array of nanoporous iron oxide microdisks  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 27th International Workshop on oxide electronics  
**PUBLICATION:**  
**MEETING PLACE:** Genoa (Italy)  
**YEAR:** 2021

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**311- AUTHORS:** S. Martins, J. de Rojas, Z. Tan, M. Cialone, A. Lopeandia, J. Herrero-Martín, J. L. Costa-Krämer, E. Menéndez, J. Sort  
**TITLE:** Dynamic electric-field-induced magnetic effects in cobalt oxide thin films: towards magneto-ionic synapses  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 2022 Joint MMM-Intermag  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans (USA)  
**YEAR:** 2022

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**312- AUTHORS:** M. de h-Óra, J. Castell-Queralt, A. Kursomovic, A. Nicolenco, J. Sort, J. L. MacManus-Driscoll  
**TITLE:** Magnetoelectric Coupling in Inorganic/Organic Hybrid Composite Thin Films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MRS Spring Meeting 2022

**PUBLICATION:**  
**MEETING PLACE:** Honolulu (USA)  
**YEAR:** 2022

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**313- AUTHORS:** S. Martins, Z. Ma, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Enhancing room temperature magneto-ionic motion in cobalt oxide by electrolyte engineering  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 23rd International Conference on Solid State Ionics (SSI-23)  
**PUBLICATION:**  
**MEETING PLACE:** Boston (USA)  
**YEAR:** 2022

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**314- AUTHORS:** E. Menéndez, S. Martins, J. de Rojas, A. Quintana, J. Sort  
**TITLE:** ON-OFF ferromagnetism in  $\text{Co}_3\text{O}_4$  by voltage-driven oxygen ion transport  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 23rd International Conference on Solid State Ionics (SSI-23)  
**PUBLICATION:**  
**MEETING PLACE:** Boston (USA)  
**YEAR:** 2022

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**315- AUTHORS:** J. de Rojas, Z. Tan, A. Quintana, E. Menéndez, J. Sort  
**TITLE:** Thinking Magneto-ionics: Neuromorphic Functionalities in Magnetic Nitride Films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** IOP Magnetism Conference  
**PUBLICATION:**  
**MEETING PLACE:** York, United Kingdom  
**YEAR:** 2022

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**316- AUTHORS:** A. Bartkowska, O. Careta, C. Nogues, E. Pellicer, J. Sort  
**TITLE:** Engineered porous  $\text{Fe}_{50}\text{Mn}_{50}$  alloys with addition of Ag as antibacterial element for biodegradable implant applications  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Junior Euromat  
**PUBLICATION:**  
**MEETING PLACE:** Coimbra, Portugal  
**YEAR:** 2022

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**317- AUTHORS:** A. Nicolenco, N. Tsyntsar, H. Cesiulis, E. Pellicer, J. Sort  
**TITLE:** Functional properties of Fe-Ga alloys prepared by electrodeposition  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 5th International Conference on Nanomaterials Science and Mechanical Engineering  
**PUBLICATION:**  
**MEETING PLACE:** Aveiro, Portugal  
**YEAR:** 2022

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**318- AUTHORS:** M. O. Liedke, M. Butterling, J. de Rojas, A. Quintana, A. Lopeandía, E. Menéndez, J. L. Costa-Krämer, E. Hirschmann, J. Sort, A. Wagner

**TITLE:** Defect-assisted ion transport in magneto-ionic nitrides probed by positrons  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** 19th International Conference on Positron Annihilation, ICPA-19  
**PUBLICATION:**  
**MEETING PLACE:** Helsinki, Finland  
**YEAR:** 2022

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**319- AUTHORS:** E. Menéndez, S. Martins, J. de Rojas, A. Quintana, Z. Tan, J. L. Costa-Krämer, J. Sort  
**TITLE:** ON-OFF ferromagnetism in  $\text{Co}_3\text{O}_4$  by voltage-driven oxygen ion migration  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MMM 2022  
**PUBLICATION:**  
**MEETING PLACE:** Minneapolis, USA  
**YEAR:** 2022

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**320- AUTHORS:** Z. Tan, J. de Rojas, A. Quintana, J. L. Costa-Krämer, E. Menéndez, J. Sort  
**TITLE:** Boosting nitrogen magneto-ionics: from binary to ternary transition metal nitrides  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MMM 2022  
**PUBLICATION:**  
**MEETING PLACE:** Minneapolis, USA  
**YEAR:** 2022

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**321- AUTHORS:** Z. Ma, S. Martins, E. Pellicer, E. Menendez, J. Sort  
**TITLE:** Improving Voltage-driven ON-OFF Ferromagnetism in Cobalt Oxide via Electrolyte Engineering  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MMM 2022  
**PUBLICATION:**  
**MEETING PLACE:** Minneapolis, USA  
**YEAR:** 2022

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**322- AUTHORS:** D. Raja, G. Barrerab, F. Celegatob, A. Nicolenco, J. Sort, E. Pellicer, P. Tiberto, P. Rizzi  
**TITLE:** Dense and Mesoporous FePd Nanowires as Excellent SERS-active Substrates  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Junior Euromat 2022  
**PUBLICATION:**  
**MEETING PLACE:** Coimbra, Portugal  
**YEAR:** 2022

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**323- AUTHORS:** J.M.A. Escobar Hernández, J. Sort, E. Pellicer  
**TITLE:** Antibacterial hydroxyapatite/silver composite coatings onto mechanically improved TiMoNbTa alloy: evaluation and optimization of electrodeposition processes  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Junior Euromat 2022  
**PUBLICATION:**  
**MEETING PLACE:** Coimbra, Portugal  
**YEAR:** 2022

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**324- AUTHORS:** D. Raja, G. Barrerab, F. Celegatob, A. Nicolenco, J. Sort, E. Pellicer, P. Tiberto, P. Rizzi  
**TITLE:** Dense and Mesoporous FePd Nanowires as Excellent SERS-active Substrates  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** E-MRS-2022  
**PUBLICATION:**  
**MEETING PLACE:** virtual  
**YEAR:** 2022

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**325- AUTHORS:** A. Barkowska, E. Pellicer, J. Sort  
**TITLE:** Recent progress in the growth and characterization of FeMnAg alloys  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** BIOREMIA summer school, Nanomaterials and Nanotechnologies for the prevention of bacterial biofilms  
**PUBLICATION:**  
**MEETING PLACE:** Ioannina, Greece  
**YEAR:** 2022

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**326- AUTHORS:** M. Escobar, E. Pellicer, J. Sort  
**TITLE:** Novel Ti-based alloys with antibactericide coatings  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** BIOREMIA summer school, Nanomaterials and Nanotechnologies for the prevention of bacterial biofilms  
**PUBLICATION:**  
**MEETING PLACE:** Ioannina, Greece  
**YEAR:** 2022

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**327- AUTHORS:** S. Martins, E. Menéndez, E. Pellicer, J. Sort  
**TITLE:** Improving magneto-ionic rates by electrolyte engineering  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** BeMAGIC Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Innsbruck, Austria  
**YEAR:** 2022

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**328- AUTHORS:** Z. Tan, E. Menéndez, E. Pellicer, J. Sort  
**TITLE:** Emulating neuronal synapses using nitrogen magneto-ionics  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** BeMAGIC Workshop  
**PUBLICATION:**  
**MEETING PLACE:** Innsbruck, Austria  
**YEAR:** 2022

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**329- AUTHORS:** M. O. Liedke, M. Butterling, J. de Rojas, A. Quintana, A. Lopeandía, E. Menéndez, E. Hirschmann, A. G. Attallah, J. Sort, A. Wagner  
**TITLE:** Defect-assisted ion transport in magneto-ionic functional oxides and nitrides probed by positrons  
**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** E-MRS-2022 Fall meeting  
**PUBLICATION:**  
**MEETING PLACE:** Warsaw, Poland  
**YEAR:** 2022

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**330- AUTHORS:** K. Eiler, R. Fagotto Clavijo, A. González-Campo, J. Sort, E. García-Lecina, M. Lekka, E. Pellicer  
**TITLE:** Highly nanoporous Ni-based electrocatalysts by electrodeposition  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** TNT 2022  
**MEETING PLACE:** Warsaw, Poland  
**YEAR:** 2022

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**331- AUTHORS:** A. Bartkowska, A. Blanquer, A. Turner, M. Trobos, C. Nogués, E. Pellicer, J. Sort  
**TITLE:** Porous Fe-Mn alloys with additions of Ag/ZnO for biodegradable implant applications with antibiofilm properties  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Thermec 23  
**PUBLICATION:**  
**MEETING PLACE:** Graz, Austria  
**YEAR:** 2023

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**332- AUTHORS:** Z. Ma, M. Peda, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Room-temperature magneto-ionic control of ON-OFF ferromagnetism in bimetallic FeCo nitrides  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** AIM 23  
**PUBLICATION:**  
**MEETING PLACE:** Moena / Italy  
**YEAR:** 2023

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**333- AUTHORS:** P. Monalisha, Z. Ma, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Synaptic plasticity modulation in magneto-ionic synapse for neuromorphic computing  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** Neuromorphic Materials, Devices, Circuits and Systems (NeuMatDeCaS)  
**PUBLICATION:**  
**MEETING PLACE:** online  
**YEAR:** 2023

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**334- AUTHORS:** E. Menéndez, J. Sort  
**TITLE:** Deep materials: neuromorphic  
**TYPE OF PRESENTATION:** ORAL/POSTER (exhibition)  
**CONGRESS:** Mobile World Congress - 4YFN  
**PUBLICATION:**  
**MEETING PLACE:** Barcelona, Spain  
**YEAR:** 2023

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**335- AUTHORS:** E. Niapos, J. A. Arregi, L. Čelko, E. Menéndez, V. Uhlíř, J. Sort

**TITLE:** Control of Exchange Bias in HfO<sub>2</sub>/Co via Magneto-ionic Motion  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Intermag 2023  
**PUBLICATION:**  
**MEETING PLACE:** Sendai, Japan  
**YEAR:** 2023

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**336- AUTHORS:** P. Nizet, N. López-Pintó, F. Chiabrera, E. Menendez, E. Pellicer, A. Morata, F. Baiutti, J. Sort, A. Tarancón  
**TITLE:** Control of functional properties of perovskite oxides by voltage-driven oxygen-ion transport  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** E-MRS Spring Meeting  
**PUBLICATION:**  
**MEETING PLACE:** Strasbourg, France  
**YEAR:** 2023

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**337- AUTHORS:** A. Arrendono, E. Menéndez, E. Pellicer, J. Sort  
**TITLE:** Magneto-ionic effects in mesoporous oxidized Ni-Co alloy electrodeposited films  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 7th Scientific Meeting of Phd Students  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2023

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**338- AUTHORS:** R. De Paz, T. Collet, A. Hubin, J. Sort, E. Pellicer  
**TITLE:** Electrodeposited Ni-W coatings for hydrogen evolution reaction in acidic media: insights on electrocatalyst durability  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JPhD2023 7th Scientific Meeting  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2023

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**339- AUTHORS:** Z. Ma, L. Fuentes-Rodriguez, Z. Tan, E. Pellicer, L. Abad, J. Herrero-Martín, E. Menéndez, N. Casañ-Pastor, J. Sort  
**TITLE:** Magneto-ionic control of magnetism via wireless bipolar electrochemistry in CoN thin films  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JEMS 2023  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2023

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**340- AUTHORS:** E. Pellicer, S. Martins, Z. Ma, N. López-Pintó, A. Arredondo, X. Solans-Monfort, L. Rodriguez-Santiago, M. Sodupe, E. Menéndez, J. Sort  
**TITLE:** Enhancing magneto-ionics in electrolyte-gated cobalt oxide thin films by fine tuning electrolyte composition  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JEMS 2023  
**PUBLICATION:**

**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2023

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**341- AUTHORS:** Z. Tan, J. de Rojas, A. Quintana, J. L. Costa-Krämer, E. Menéndez, J. Sort  
**TITLE:** Brain-inspired magneto-ionics in transition metal nitrides  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JEMS 2023  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2023

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**342- AUTHORS:** P. Monalisha, Z. Ma , N. López Pintó, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Artificial Synapses based on Voltage-Controlled Magnetism via Nitrogen Ion Migration for Neuromorphic Computing  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** JEMS 2023  
**PUBLICATION:**  
**MEETING PLACE:** Madrid, Spain  
**YEAR:** 2023

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**343- AUTHORS:** P. Monalisha, Z. Ma, E. Pellicer , E. Menéndez, J. Sort  
**TITLE:** Multilevel Magnetic Synapses Based on Voltage-controlled Ion Migration for Neuromorphic Application  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** MMM  
**PUBLICATION:**  
**MEETING PLACE:** Dallas, USA  
**YEAR:** 2023

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**344- AUTHORS:** P. Grèbol-Tomàs, J. M. Trigo-Rodríguez, J. Ibáñez-Insa, E. Peña-Asensio, R. Cuscó, I. Weber, J. Sort  
**TITLE:** Nanoindentation of lunar basalts: mechanical properties of the NWA 12008 meteorite  
**TYPE OF PRESENTATION:** POSTER  
**CONGRESS:** 55th Lunar and Planetary Science Conference  
**PUBLICATION:**  
**MEETING PLACE:** The Woodlands, USA  
**YEAR:** 2024

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**345- AUTHORS:** E. Peña-Asensio, J. M. Trigo-Rodríguez, J. Sort, J. Ibáñez-Insa, A. Rimola, P. Grèbol-Tomàs  
**TITLE:** Machine learning of lunar meteorites: classification and mechanical property prediction with prior-data fitted network and regression models  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** 55th Lunar and Planetary Science Conference  
**PUBLICATION:**  
**MEETING PLACE:** The Woodlands, USA  
**YEAR:** 2024

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**346- AUTHORS:** A. Arredondo-López, K. Eiler, A. Quintana, G. Rius, I. Spasojevic, A. Salicio, A. Nicolenco, M. Lekka, E. García-Lecina, G. Brunin, D. Waroquiers, G.-M. Rigagnese, E. Pellicer, E. Menéndez, J. Sort

**TITLE:** Composition-dependent voltage-driven OFF-ON switching of ferromagnetism in Co-Ni oxide microdisks

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** JPHD 2024

**PUBLICATION:**

**MEETING PLACE:** Bellaterra, Spain

**YEAR:** 2024

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**347- AUTHORS:** P. Nizet, F. Chiabrera, N. López-Pintó, N. Alayo, P. Langner, F. Baiutti, A. Morata, J. Sort, A. Tarancón

**TITLE:** Electrochemical oxygen intercalation for precise tuning of functionalities in nextgeneration oxide-based devices

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** International Workshop on Oxide Electronics

**PUBLICATION:**

**MEETING PLACE:** Damstadt, Germany

**YEAR:** 2024

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**348- AUTHORS:** I.Fina, T. Zakusylo, A. Quintana, V. Lenzi, J.L. Ortola, J. Silva, L. Marques, J. Lyu, J. Sort, F.Sanhcez

**TITLE:** Robust Ferroelectricity and Magnetoelectric Coupling in an Epitaxial-Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub>-based Multiferroic System

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** UFFC\_JS\_2024

**PUBLICATION:**

**MEETING PLACE:** Taipei, Taiwan

**YEAR:** 2024

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**349- AUTHORS:** I. Fina, H. Tan, A. Quintana, N. Dix, S. Estandía, J. Sort, F. Sánchez

**TITLE:** Control of Ferroelectric Polarization by Light in an Absorbing System Based on Ferroelectric HfO<sub>2</sub> Revealed by PFM

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** UFFC\_JS\_2024

**PUBLICATION:**

**MEETING PLACE:** Taipei, Taiwan

**YEAR:** 2024

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**350- AUTHORS:** B. Hernández-Concepción, A. Garcia-Casas, E. Pellicer, J. Sort, M. Lekka, E. García-Lecina

**TITLE:** Development and characterisation of Ni-based coatings with hydrogen barrier properties

**TYPE OF PRESENTATION:** Poster

**CONGRESS:** Eurocorr 2024

**PUBLICATION:**

**MEETING PLACE:** Paris, France

**YEAR:** 2024

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**351- AUTHORS:** P. Grèbol-Tomàs, J. M. Trigo-Rodríguez, J. Ibáñez-Insa, E. Peña-Asensio, R. Cuscó, I. Weber, J. Sort  
**TITLE:** Nanoindentation of Lunar Basalts: Mechanical Properties of the Northwest Africa 12008 Meteorite  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Annual Meetings of the Meteoritical Society 2024  
**PUBLICATION:**  
**MEETING PLACE:** Brussels, Belgium  
**YEAR:** 2024

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**352- AUTHORS:** K. Eiler, J. Sort, E. Pellicer  
**TITLE:** Magnetic field-enhanced hydrogen evolution reaction on Ni foam electrodes  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ANM 2024  
**PUBLICATION:**  
**MEETING PLACE:** Aveiro, Portugal  
**YEAR:** 2024

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**353- AUTHORS:** P. Nizet, F. Chiabrera, N. López-Pintó, N. Alayo, P. Langner, F. Baiutti, E. Pellicer, A. Morata, J. Sort, A. Tarancón  
**TITLE:** Oxygen-ion control and functional properties of  $\text{La}_{1-x}\text{Sr}_x\text{FeO}_{3-\delta}$   
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Solid State Ionics 2024  
**PUBLICATION:**  
**MEETING PLACE:** Westminster, UK  
**YEAR:** 2024

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**354- AUTHORS:** A. Quintana, T. Zakusylo, J. L. Ortolá Yano, V. Lenzi, J. P. B. Silva, L. Marques, J. Lyu, J. Sort, F. Sánchez, Ignasi Fina  
**TITLE:** Co/Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> multiferroic heterostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** Bienal RSEF  
**PUBLICATION:**  
**MEETING PLACE:** San Sebastian, Spain  
**YEAR:** 2024

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**355- AUTHORS:** E. Niapos, J. Ander Arregi, L. Čelko, E. Menéndez, V. Uhlř, J. Sort  
**TITLE:** Electrical control of exchange bias in HfO<sub>2</sub>/CoO/Co heterostructures through voltage-driven oxygen ion motion  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** 25th International Colloquium on Magnetic Films and Surfaces (ICMFS2024)  
**PUBLICATION:**  
**MEETING PLACE:** Perugia, Italy  
**YEAR:** 2024

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**356- AUTHORS:** A. Arredondo-López, K. Eiler, G. Rius, A. Salicio, A. Nicolenco, I. Spasojevic, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Magneto-ionic Behavior in Oxidized Co-Ni Microdisks: a Boost towards Future Magnetoelectric Devices  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** ICM2024

**PUBLICATION:**  
**MEETING PLACE:** Bologna, Italy  
**YEAR:** 2024

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**357- AUTHORS:** I. Spasojević, Z. Ma, A. Barrera, F. Celegato, E. Menéndez, A. Palau, K. S. Buchanan, P. Tiberto, [J. Sort](#)  
**TITLE:** Voltage-induced manipulation of magnetic nanodots: generation and fine-tuning of magnetic vortices  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** ICM2024  
**PUBLICATION:**  
**MEETING PLACE:** Bologna, Italy  
**YEAR:** 2024

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**358- AUTHORS:** Z. Ma, S. Martins, Z. Tan, S. Chen, E. Montebancho, M. O. Liedke, M. Butterling, A. G. Attallah, E. Hirschmann, A. Wagner, A. Quintana, E. Pellicer, D. Ravelosona, [J. Sort](#), E. Menéndez  
**TITLE:** Controlling Magneto-ionics by Defect Engineering Through Light Ion Implantation  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MMM-Intermag 2025  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans, USA  
**YEAR:** 2025

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**359- AUTHORS:** N. López-Pintó, C. J. Jensen, Z. Chen, Z. Tan, M. O. Liedke, M. Butterling, A. Wagner, J. Herrero-Martín, E. Menéndez, J. Nogués, K. Liu, [J. Sort](#)  
**TITLE:** Magneto-ionically Tuning the Magnetization and Exchange Bias in all-solid-state CoMnN Heterostructures  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MMM-Intermag 2025  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans, USA  
**YEAR:** 2025

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**360- AUTHORS:** I. Spasojević, Z. Ma, A. Barrera, F. Celegato, A. Palau, K. S. Buchanan, P. Tiberto, [J. Sort](#)  
**TITLE:** Magneto-Ionic Vortices: Voltage-Controlled Curling-Spin Analog-Memory Nanomagnets  
**TYPE OF PRESENTATION:** Poster  
**CONGRESS:** MMM-Intermag 2025  
**PUBLICATION:**  
**MEETING PLACE:** New Orleans, USA  
**YEAR:** 2025

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**361- AUTHORS:** P. Nizet, F. Chiabrera, N. López-Pintó, N. Alayo, P. Langner, F. Baiutti, A. Morata, [J. Sort](#), A. Tarancón  
**TITLE:** Regulating the Magnetic Properties of  $\text{La}_{0.5}\text{Sr}_{0.5}\text{FeO}_{3-\delta}$  Through Voltage-Controlled Oxygen Content  
**TYPE OF PRESENTATION:** ORAL  
**CONGRESS:** MMM-Intermag 2025  
**PUBLICATION:**

**MEETING PLACE:** New Orleans, USA  
**YEAR:** 2025

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**362- AUTHORS:** I. Fina, T. Song, H. Tan, T. Zakusylo, A. Quintana, N. Dix, P. Koutsogiannis, J. L. Ortola, J. Lyu, S. Estandía, J. Sort, C. Magén, J.A. Pardo, V. Lenzi, L. Marques, J. Silva, F. Sánchez

**TITLE:** Ferroelectric hafnia: an opportunity for next-gen memory devices

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** GEFES 2025

**PUBLICATION:**

**MEETING PLACE:** Oviedo, Spain

**YEAR:** 2025

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**363- AUTHORS:** P. Nizet, F. Chiabrera, N. López-Pintó, N. Alayo, P. Langner, F. Baiutti, A. Morata, J. Sort, A. Tarancón

**TITLE:** Electrochemical control of oxygen deficiency in (La,Sr)FeO<sub>3-δ</sub> thin films for precise modulation of magnetic and electrical properties

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** Electronic Materials and Applications (EMA 2025)

**PUBLICATION:**

**MEETING PLACE:** Denver, USA

**YEAR:** 2025

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**364- AUTHORS:** P. Nizet, F. Chiabrera, N. López-Pintó, N. Alayo, P. Langner, F. Baiutti, A. Morata, J. Sort, A. Tarancón

**TITLE:** The role of voltage-control of oxygen-vacancy-induced magnetic transition on the electrical conductivity of La<sub>0.5</sub>Sr<sub>0.5</sub>FeO<sub>3-δ</sub>

**TYPE OF PRESENTATION:** POSTER

**CONGRESS:** ISAF 2025

**PUBLICATION:**

**MEETING PLACE:** Graz, Austria

**YEAR:** 2025

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**365- AUTHORS:** I. Fina, T. Song, H. Tan, T. Zakusylo, A. Quintana, N. Dix, P. Koutsogiannis, J.L. Ortola, J. Lyu, S. Estandía, C. Magén, J. A. Pardo, V. Lenzi, L. Marques, J. Sort, J. Silva, F. Sánchez

**TITLE:** Exploiting interface engineering in epitaxial ferroelectric hafnia to investigate novel phenomena

**TYPE OF PRESENTATION:** ORAL

**CONGRESS:** 2025 IEEE International Symposium on Applications of Ferroelectrics

**PUBLICATION:**

**MEETING PLACE:** Graz, Austria

**YEAR:** 2025

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**366- AUTHORS:** S. Chen, E. Montebancho, M. Deroo, Z. Ma, A. Cataldo, A. Lamperti, A. Solignac, S. Ono, E. Menéndez, J. Sort, D. Ravelosona

**TITLE:** Boosting magneto-ionics in Ta/CoFeB/Pt/MgO/HfO<sub>2</sub> by interfacial atomic intermixing through Ne<sup>+</sup> irradiation

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** MMM 2025

**PUBLICATION:**

**MEETING PLACE:** Palm Beach, USA  
**YEAR:** 2025

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**367- AUTHORS:** A. Arredondo-López, A. Quintana, K. Eiler, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Voltage control of magnetism in Co-Ni oxides: A step-up towards energy-efficient magnetoelectric devices  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** JEMS 2025  
**PUBLICATION:**  
**MEETING PLACE:** Frankfurt, Germany  
**YEAR:** 2025

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**368- AUTHORS:** A. Arredondo-López, A. Quintana, K. Eiler, G. Rius, I. Spasojevic, A. Salicio, A. Nicolenco, E. García-Lecina, G. Brunin, D. Waroquiers, G.-M. Rignanesse, E. Pellicer, E. Menéndez, J. Sort  
**TITLE:** Switching magnetism with voltage: Advanced energy-efficient Co-Ni-based magnetoelectric devices  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** 4th Conference on Advanced Materials in Spain  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2025

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**369- AUTHORS:** I. Fina, A. Quintana, T. Zakusylo, C. Magén, T. Song, J. Lyu, N. Dix, Z. Ma, E. Menéndez, W.Dong, J. Zou, M. Foerster, M.A. Niño, C. Cazorla, V. Lenzi, J.P.B. Silva, L. Marques, J. Sort, F. Sánchez  
**TITLE:** Magnetoelectric effects in multiferroic structures based on epitaxial ferroelectric HfO<sub>2</sub> films  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** 4th Conference on Advanced Materials in Spain  
**PUBLICATION:**  
**MEETING PLACE:** Bellaterra, Spain  
**YEAR:** 2025

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**370- AUTHORS:** R. de Paz, N. Lopez, K. Eiler, J. Sort, A. Hubin, E. Pellicer  
**TITLE:** Electrodeposited Ni-W Films: Exploring the Impact of Engineered Porosity and Tungsten Content on Mechanical and Magnetic Properties  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:** EDNQANO-16  
**PUBLICATION:**  
**MEETING PLACE:** Florence, Italy  
**YEAR:** 2025

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**371- AUTHORS:** M. O. Liedke, E. Hirschmann, U. Bektas, G. Hlawacek, I. Makkonen, R. Ratajczak, Z. Ma, E. Menendez, J. Sort, G. Zhang, S. Prucnal, A. Wagner  
**TITLE:** Defects in functional oxides probed by positron annihilation spectroscopy  
**TYPE OF PRESENTATION:** Oral  
**CONGRESS:**  
**PUBLICATION:**  
**MEETING PLACE:**  
**YEAR:** 2025

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**372- AUTHORS:** A. Arredondo-López, A. Quintana, K. Eiler, G. Rius, I. Spasojevic, A. Salicio, A. Nicolenco, E. García-Lecina, G. Brunin, D. Waroquiers, G.-M. Rignanese, E. Pellicer, E. Menéndez, [J. Sort](#)

**TITLE:** Switching magnetism with voltage: Advanced energy-efficient Co-Ni-based magnetoelectric devices

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** 4<sup>th</sup> Conference on Advanced Materials in Spain

**PUBLICATION:**

**MEETING PLACE:** Bellaterra, Spain

**YEAR:** 2025

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**373- AUTHORS:** L. Martínez-Armesto, Z. Ma, H. Tan, E. Pellicer, I. Spasojevic, [J. Sort](#)

**TITLE:** Independent Magnetic and Electric Field Control of Magneto-Ionic States for Energy-Efficient Synaptic Devices

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** MATSUS Spring 2026

**PUBLICATION:**

**MEETING PLACE:** Barcelona, Spain

**YEAR:** 2026

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**374- AUTHORS:** H. Tan, Z. Ma, C. B. Karroum, M. Liparo, J.-P. Jay, D. Spenato, D. T. Dekadjevi, L. Martínez Armesto, A. Quintana, [J. Sort](#)

**TITLE:** Light-Controlled Multiferroic Heterostructures for Next-Generation Energy-Efficient Neuromorphic Computing

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** MATSUS Spring 2026

**PUBLICATION:**

**MEETING PLACE:** Barcelona, Spain

**YEAR:** 2026

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**375- AUTHORS:** G. Brunin, G.-M. Rignanese, D. Waroquiers, R. de Paz-Castany, A. Arredondo-López, K. Eiler, A. Nicolenco, M. Lekka, A. Quintana, G. Rius, I. Spasojevic, A. Salicio, E. García-Lecina, T. Collet, A. Hubin, E. Menéndez, [J. Sort](#), E. Pellicer

**TITLE:** Atomic modelling using density-functional theory and machine-learned interatomic potentials, and process optimization through active learning

**TYPE OF PRESENTATION:** Oral

**CONGRESS:** Coatings 2026

**PUBLICATION:**

**MEETING PLACE:** Athens, Greece

**YEAR:** 2026

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# PhD Theses Supervised

**TITLE:** Deformation behavior and strengthening of bulk metallic glasses and nanocomposites

**Ph. D. STUDENT:** Amadeu Concustell

**CO-SUPERVISORS:** Jordi Sort, Dolors Baró

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 22/03/2007

**MARK:** Excellent Cum Laude

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**TITLE:** Study of the structural changes in Zr-based bulk metallic glasses upon annealing and deformation processes

**Ph. D. STUDENT:** Nele van Steenberge

**CO-SUPERVISORS:** Dolors Baró, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 20/06/2008

**MARK:** Excellent Cum Laude

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**TITLE:** Generation of ferromagnetism on non-magnetic materials

**Ph. D. STUDENT:** Enric Menéndez

**CO-SUPERVISORS:** Jordi Sort, Josep Nogués

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 26/11/2008

**MARK:** Excellent Cum Laude

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**TITLE:** Metallic glasses and derived composite materials: a correlation between microstructure and mechanical properties

**Ph. D. STUDENT:** Jordina Fornell

**SUPERVISOR:** Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 26/04/2012

**MARK:** "Apte" Cum Laude

---

**TITLE:** Multifunctional electrodeposited nanocrystalline Cu-Ni films

**Ph. D. STUDENT:** Aida Varea

**CO-SUPERVISORS:** Jordi Sort, Eva Pellicer

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 01/02/2013

**MARK:** "Apte" Cum Laude

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**TITLE:** Biocompatible Ti-based metallic glasses and nanocomposite materials

**Ph. D. STUDENT:** Anna Hynowska

**CO-SUPERVISORS:** Dolors Baró, Eva Pellicer, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 31/10/2014

**MARK:** "Apte" Cum Laude

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**TITLE:** Electrodeposition of novel nanostructured and porous materials for advanced applications: synthesis, structural characterization and physical/chemical performance

**Ph. D. STUDENT:** Jin Zhang

**CO-SUPERVISORS:** Eva Pellicer, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 22/07/2016                      **MARK:** "Apte" Cum Laude

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**TITLE:** Correlation between the microstructure and physical properties of nanocrystalline and nanocomposite electrodeposited 2D and 1D materials  
**Ph. D. STUDENT:** Irati Golvano  
**CO-SUPERVISORS:** Eva Pellicer, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 30<sup>th</sup> March 2017                      **MARK:** Excellent Cum Laude

---

**TITLE:** Synthesis and assessment of the mechanical, magnetic and photoluminescence properties of nanoporous oxide materials for advanced engineering applications  
**Ph. D. STUDENT:** Junpeng Fan  
**CO-SUPERVISORS:** Miguel Guerrero, Eva Pellicer, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 23<sup>rd</sup> October 2017                      **MARK:** Excellent Cum Laude

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**TITLE:** Synthesis, structural characterization and mechanical properties of nanocrystalline alloys and bulk amorphous alloys for novel engineering applications  
**Ph. D. STUDENT:** Yuping Feng  
**CO-SUPERVISORS:** Jordina Fornell, Eva Pellicer, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 30<sup>th</sup> October 2017                      **MARK:** Excellent Cum Laude

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**TITLE:** Synthesis, structure, magnetic properties and magnetoelectric effects in porous materials  
**Ph. D. STUDENT:** Alberto Quintana  
**CO-SUPERVISORS:** Eva Pellicer, Enric Menéndez, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 20<sup>th</sup> June 2018                      **MARK:** Excellent Cum Laude

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**TITLE:** Electrodeposition of rare-earth- and noble metal-free hard-magnetic, shape-memory and magnetostrictive alloys  
**Ph. D. STUDENT:** Doga Bilican  
**CO-SUPERVISORS:** Jordi Sort, Eva Pellicer, Jordina Fornell  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 29<sup>th</sup> June 2018                      **MARK:** Excellent

---

**TITLE:** Template-assisted and template-free electrodeposition of nanoporous metallic coatings  
**Ph. D. STUDENT:** Evangelia Dislaki  
**CO-SUPERVISORS:** Eva Pellicer, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 26<sup>th</sup> October 2018

**MARK:** Excellent Cum Laude

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**TITLE:** Development and characterization of novel electroless nickel coatings: multifunctional applications from the micro to the nanoscale

**Ph. D. STUDENT:** Asier Salicio

**CO-SUPERVISORS:** Eva Pellicer, Eva García-Lecina, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 20<sup>th</sup> November 2020

**MARK:** Excellent Cum Laude

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**TITLE:** Synthesis and magnetoelectric properties of Co-Pt based porous materials

**Ph. D. STUDENT:** Cristina Navarro-Senent

**CO-SUPERVISORS:** Eva Pellicer, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 18<sup>th</sup> December 2020

**MARK:** Excellent Cum Laude

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**TITLE:** Electrodeposition of nanostructured nickel-platinum-based electrocatalysts for hydrogen energy systems

**Ph. D. STUDENT:** Konrad Eiler

**CO-SUPERVISORS:** Eva Pellicer, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 29<sup>th</sup> July 2021

**MARK:** Excellent Cum Laude

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**TITLE:** Control of magnetism with voltage in ferromagnetic/ferroelectric multiferroic heterostructures

**Ph. D. STUDENT:** Veronica Sireus

**CO-SUPERVISORS:** Enric Menéndez, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 2<sup>nd</sup> September 2022

**MARK:** Excellent Cum Laude

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**TITLE:** Boosting magneto-ionic effects in Co oxide films by electrolyte gating

**Ph. D. STUDENT:** Sofia Martins

**CO-SUPERVISORS:** Enric Menéndez, Eva Pellicer, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**DATE:** 27<sup>th</sup> March 2023

**MARK:** Excellent

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**TITLE:** Fabrication and characterization of FeMn alloys with antibiofilm properties for biodegradable implant applications

**Ph. D. STUDENT:** Aleksandra Bartkowska

**CO-SUPERVISORS:** Eva Pellicer, Carme Nogués, Jordi Sort

**UNIVERSITY:** Universitat Autònoma de Barcelona

**FACULTY/SCHOOL:** Sciences

**EXPECTED DATE OF DEFENSE:** 9<sup>th</sup> November 2023

**MARK:** Excellent Cum Laude

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**TITLE:** Optimizing magneto-ionics: towards brain-inspired functionalities

**Ph. D. STUDENT:** Tan Zhengwei  
**CO-SUPERVISORS:** Enric Menéndez, [Jordi Sort](#)  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 4<sup>th</sup> December 2023      **MARK:** Excellent Cum Laudem

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**TITLE:** Oxygen magneto-ionic effects in CoNi-based structures  
**Ph. D. STUDENT:** Aitor Arredondo  
**CO-SUPERVISORS:** Eva Pellicer, Enric Menéndez, [Jordi Sort](#)  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 27<sup>th</sup> November 2025      **MARK:** Excellent Cum Laude

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**TITLE:** Solid-State Magneto-Ionic Modulation of Magnetic Order and Interfacial Coupling in Transition-Metal Oxides and Nitrides  
**Ph. D. STUDENT:** Nicolau López  
**CO-SUPERVISORS:** Eva Pellicer, Enric Menéndez, [Jordi Sort](#)  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 22<sup>nd</sup> January 2026      **MARK:** Excellent Cum Laude

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- I have been “**Academic Tutor**” of the following PhD recipients from the UAB Campus: Victor Rouco, Jordi Llobet, Regina Galceran, Jackeline Narvaez, Pablo Cayado, Rohini Kumara Cordero, Fanmao Liu, Laura Mir, Yuping Feng, Fabian Vasquez, Marc González, Rafael Cichelero, Pengyi Tang, Doga Bilican, Onés Temiño, Sara Marti, Qiaoming Zhang, Safoura Tanbakouei, Cristina Navarro-Senent, etc.

## Ongoing PhD Theses

**TITLE:** Aqueous electrodeposition of hydroxyapatite (HA) and Ag NPs-HA and ZnO-HA composite films with antifouling performance  
**Ph. D. STUDENT:** Michael Escobar  
**CO-SUPERVISORS:** Eva Pellicer, [Jordi Sort](#)  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**EXPECTED DATE OF DEFENSE:** December 2023

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**TITLE:** Merging magneto-ionics with nanocalorimetry for spin-electronic applications  
**Ph. D. STUDENT:** Simone Privitera-Uno  
**CO-SUPERVISORS:** Aitor Lopeandia, Enric Menéndez, [Jordi Sort](#)  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**EXPECTED DATE OF DEFENSE:** February 2027

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**TITLE:** Magneto-ionic effects for brain-inspired computing

**Ph. D. STUDENT:** Luís Martínez Armesto  
**CO-SUPERVISORS:** Irena Spasojevic, Eva Pellicer, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**EXPECTED DATE OF DEFENSE:** July 2027

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**TITLE:** Magneto-ionic effects in spin-orbit torque systems  
**Ph. D. STUDENT:** Hengshuo Zhang  
**CO-SUPERVISORS:** Can Onur, Jordi Sort  
**UNIVERSITY:** Universitat Autònoma de Barcelona / ICMAB  
**FACULTY/SCHOOL:** Sciences  
**EXPECTED DATE OF DEFENSE:** September 2029

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- I am “**Academic Tutor**” of the following PhD students from the UAB Campus: Tan Zhengwei, Aleksandra Bartkowska, Èric Bach, Sofia Martins, Linda Medondijo, Josef Svetlik, Jia Jiahui, Tan Huan, Andrés Gómez, Ivan Fernández, Nils Wittemeier, Christina Stefani, Christian Schäfer, Noemí Contreras, Pablo Vales, José Manuel de la Cruz, Victor Fuentes, etc.

## Final Degree / Master Theses Supervised

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**TITLE:** Síntesi i caracterització de nanopartícules de níquel  
**MASTER STUDENT:** Bernat Faura  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Engineering Technical School (ETSE)  
**DATE:** 21/02/2007      **MARK:** Excellent

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**TITLE:** Metal(Co)-ceramic nanocomposites: synthesis and characterization  
**MASTER STUDENT:** Enric Menéndez  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 21/03/2007      **MARK:** Excellent

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**TITLE:** Characterization of  $\text{Ti}_{67.79}\text{Fe}_{28.36}\text{Sn}_{3.85}$  nanocomposite rods: Influence of cooling rate gradient and thermal stability on microstructure and mechanical properties  
**MASTER STUDENT:** Nele van Steenberge  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 21/03/2007      **MARK:** Excellent

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**TITLE:** Correlation between the structure and mechanical properties of severely-deformed  $\text{Ti}_{60}\text{Cu}_{14}\text{Ni}_{12}\text{Sn}_6\text{Nb}_{10}$  nanocomposite alloys  
**MASTER STUDENT:** Jordina Fornell  
**UNIVERSITY:** Universitat Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 15/07/2008      **MARK:** Excellent

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**TITLE:** Nanocrystalline electrodeposited Cu-Ni films with enhanced mechanical properties and tunable magnetic behaviour  
**MASTER STUDENT:** Aïda Varea  
**UNIVERSITY:** Universidad Autònoma de Barcelona  
**FACULTY/SCHOOL:** Física  
**DATE:** 21/07/2010      **MARK:** Excelente

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**TITLE:** Estudi de les propietats mecàniques i magnètiques de capes de CoNiRe obtingudes electroquímicament  
**MASTER STUDENT:** Claudi Ruiz  
**UNIVERSITY:** Universidad Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 09/07/2012      **MARK:** Excelente

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**TITLE:** *Voltage control of magnetism in nanoporous cobalt oxide thin films*  
**MASTER STUDENT:** Pau Mercier  
**UNIVERSITY:** Universidad Autònoma de Barcelona  
**FACULTY/SCHOOL:** Sciences  
**DATE:** 01/07/2019      **MARK:** Excelente

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## PhD/Master Courses Imparted

- During the period 2009-2011 I have **COORDINATED THE OFFICIAL MASTER IN MATERIALS SCIENCE AND TECHNOLOGY (CITEM) at UAB.**
- During the period 2011-2014 I was the **COORDINATOR OF THE DOCTORATE PROGRAMME IN MATERIALS SCIENCE AT UAB.**
- From 2013 onwards, member of the **Coordination Commission of the Industrial Doctorate Programme entitled “Materials Science, Nanotechnology and Industrial Processes”.**

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**Doctorate Programme:** Materials Science  
**Course Title:** Experimental Techniques in Materials Science  
**Academic Year** 2004-2005  
**Hours:** 10  
**Institution:** Universitat Autònoma de Barcelona

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**Doctorate Programme:** Physics  
**Course Title:** New Magnetic Materials  
**Academic Year** 2004-2005  
**Hours:** 15  
**Institution:** Universitat Autònoma de Barcelona

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**Doctorate Programme:** Physics  
**Course Title:** Nanostructured Materials  
**Academic Year** 2004-2005  
**Hours:** 15  
**Institution:** Universitat Autònoma de Barcelona

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**Doctorate Programme:** Physics  
**Course Title:** New Magnetic Materials  
**Academic Year** 2005-2006  
**Hours:** 15  
**Institution:** Universitat Autònoma de Barcelona

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**Doctorate Programme:** Physics  
**Course Title:** New Magnetic Materials  
**Academic Year** 2006-2007  
**Hours:** 30  
**Institution:** Universitat Autònoma de Barcelona

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**Master Programme:** Master in Materials Science and Technology  
**Course Title:** Functional Materials  
**Curs acadèmic:** 2007-2008  
**Hours:** 7.5  
**Institution:** Universitat Autònoma de Barcelona

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**Master Programme:** Master in Materials Science and Technology – Master in Advanced Physics  
**Course Title:** Materials at the nanometer scale  
**Academic Year:** 2007-2008  
**Hours:** 18.75  
**Institution:** Universitat Autònoma de Barcelona

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**Master Programme:** Master in Materials Science and Technology  
**Course Title:** Functional Materials  
**Curs acadèmic:** 2008-2009  
**Hours:** 7.5

**Institution:** Universitat Autònoma de Barcelona

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**Master Programme:** Master in Nanotechnology and Materials Science

**Course Title:** Materials at the nanometer scale

**Academic Year:** 2010-2014

**Hours:** 18.75

**Institution:** Universitat Autònoma de Barcelona

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**Master Programme:** Master in Nanotechnology and Materials Science

**Courses Title:** Nanophysics/ Functional Materials

**Academic Year:** 2010-2026

**Hours:** 12

**Institution:** Universitat Autònoma de Barcelona

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## Other Courses Imparted

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**BsC Programme:** Physics

**Course Title:** Physics I

**Academic Year** 1998-1999

**Hours:** 15

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Physics

**Course Title:** Experimental Techniques in Physics

**Academic Year** 1998-1999

**Hours:** 19

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Physics

**Course Title:** Experimental Techniques in Physics

**Academic Year** 2000-2001

**Hours:** 30

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Physics

**Course Title:** Introduction to Materials Science

**Academic Year** 2001-2002

**Hours:** 15

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Physics

**Course Title:** Physics I

**Academic Year** 2001-2002

**Hours:** 15

**Institution:** Universitat Autònoma de Barcelona

---

**BsC Programme:** Materials Science Engineering

**Course Title:** Mechanical Properties of Materials

**Academic Year** 2001-2002

**Hours:** 15

**Institution:** Universitat Autònoma de Barcelona

---

**BsC Programme:** Physics

**Course Title:** Introduction to Materials Science

**Academic Year** 2004-2005

**Hours:** 25

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Materials Science Engineering

**Course Title:** Functional Materials I

**Academic Year** 2005-2006

**Hours:** 22.5

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Materials Science Engineering

**Course Title:** Functional Materials I

**Academic Year** 2006-2007

**Hours:** 22.5

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Materials Science Engineering

**Course Title:** Functional Materials I

**Academic Year** 2007-2008

**Hours:** 22.5

**Institution:** Universitat Autònoma de Barcelona

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**BsC Programme:** Materials Science Engineering

**Course Title:** Functional Materials I

**Academic Year** 2009-2012

**Hours:** 22.5/year

**Institution:** Universitat Autònoma de Barcelona

## Specialized Courses Undertaken

June 2000: Participation in the course “Magnetic Storage Systems beyond 2000”, in Rhodes, Greece, financed by NATO and organized by Prof. G. C. Hadjipanayis.

October/November 2001: Attendance to the “Curso Interdisciplinario en Nanociencia i Nanotecnología”, Barcelona.

January 2002: Attendance to the course “Iniciación al Análisis Cuantitativo y Estadístico en los Estudios Morfológicos Comparativos”, Servicio de Microscopía (UAB and REGO&CIA S.A.), Barcelona.

March/April 2003: Attendance to the course “Higher European Research Course for Users of Large Experimental Systems”, HERCULES 2003, Grenoble, France.

April 2005: Participation at the Innovative Teaching Promotion entitled “Saturdays of Physics”, at the Universitat Autònoma de Barcelona.

18/07/2008: Participation in several activities at the Euroscience Open Forum ESOF 2008, a forum for leading scientists, young researchers, policy makers, business people and journalists.

October 2008: Participation at: "Writing a Successful ERC Starting Grant" workshop.

July 2015: Training Course on Starting Grants 2015 Interview given to the successful candidates from this Call (AGAUR).

## Stays in Internationally Recognized Centers

KEY: D=Ph.D student, P=postdoctoral. G= guest, S=staff, O=others (specify)

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**CENTRE:** Grenoble High Field Laboratory (CNRS/Max Planck)  
**PLACE:** Grenoble      **COUNTRY:** France  
**YEAR:** 2000      **LENGTH:** 3 months  
**TOPIC:** Study of the ferromagnetic-antiferromagnetic coupling with a hard ferroamgnet  
**KEY:** D

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**CENTRE:** Grenoble High Field Laboratory (CNRS/Max Planck)  
**PLACE:** Grenoble      **COUNTRY:** France  
**YEAR:** 2001      **LENGTH:** 1.5 months  
**TOPIC:** Study of the ferromagnetic-antiferromagnetic coupling with a hard ferroamgnet  
**KEY:** D

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**CENTRE:** Lujan Center (Los Alamos National Laboratory)  
**PLACE:** Los Alamos      **COUNTRY:** USA  
**YEAR:** 2001      **LENGTH:** 3 months  
**TOPIC:** Fabrication by sputtering and characterization of magnetic multilayers  
**KEY:** D

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**CENTRE:** Institute of Physics, Polish Academy of Sciences,  
**PLACE:** Varsovia      **COUNTRY:** Poland  
**YEAR:** 2002      **LENGTH:** 1.5 months  
**TOPIC:** NMR studies of ball-milled cobalt  
**KEY:** D

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**CENTRE:** LPMC (Pulsed Magnetic Fields Laboratory)  
**PLACE:** Toulouse      **COUNTRY:** France  
**YEAR:** 2002      **LENGTH:** 1 month  
**TOPIC:** Influence of high magnetic field on the ferromagnetic-antiferromagnetic coupling  
**KEY:** D

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**CENTRE:** Rheinisch-Westfälische Technische Hochschule RWTH  
**PLACE:** Aachen      **COUNTRY:** Germany  
**YEAR:** 2003      **LENGTH:** 1 month  
**TOPIC:** Preparation and characterization of ferromagnetic-antiferromagnetic nanostructures  
**KEY:** P

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**CENTRE:** European Synchrotron Radiation Facility (ESRF)  
**PLACE:** Grenoble    **COUNTRY:** France  
**YEAR:** 2003        **LENGTH:** 1 week  
**TOPIC:** XMCD studies of FeAl under high pressure  
**KEY:** P, G

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**CENTRE:** Laboratorio SPINTEC (Commissionat à l'énergie atomique)  
**PLACE:** Grenoble    **COUNTRY:** France  
**YEAR:** 2002-2004    **LENGTH:** 2 years  
**TOPIC:** Studies of perpendicular Exchange bias with applications in spin valves  
**KEY:** P, S

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**CENTRE:** Laboratorio de Física de Superficies (Universidad Autónoma de Madrid)  
**PLACE:** Madrid        **COUNTRY:** Spain  
**YEAR:** 2004        **LENGTH:** 3 weeks  
**TOPIC:** Studies of the dynamic properties of ferromagnetic-antiferromagnetic systems  
**KEY:** G

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**CENTRE:** Argonne National Laboratory  
**PLACE:** Argonne    **COUNTRY:** USA  
**YEAR:** 2004-2007        **LENGTH:** 5 months (several stays)  
**TOPIC:** Studies of magnetic vortices coupled with an antiferromagnet  
**KEY:** P, G

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**CENTRE:** Institut Laue Langevin (ILL)  
**PLACE:** Grenoble    **COUNTRY:** France  
**YEAR:** 2005        **LENGTH:** 1 week  
**TOPIC:** Diffraction studies of  $\epsilon$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles  
**KEY:** P, G

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**CENTRE:** Sincrotrone Elettra  
**PLACE:** Trieste        **COUNTRY:** Italy  
**YEAR:** 2005        **LENGTH:** 1 week  
**TOPIC:** Observation of antiferromagnetic domains by photoemission electron microscopy (PEEM) in patterned ferromagnetic-antiferromagnetic dots  
**KEY:** P, G

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**CENTRE:** SPINTEC Laboratory (Commissionat à l'énergie atomique)  
**PLACE:** Grenoble    **COUNTRY:** France  
**YEAR:** 2005-2008        **LENGTH:** 3 months (several stays)  
**TOPIC:** Fabrication and characterization of magnetic thin films  
**KEY:** G

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**CENTRE:** University of California-Davis  
**PLACE:** Davis        **COUNTRY:** USA  
**YEAR:** 2006        **LENGTH:** 3 weeks

**TOPIC:** Magnetic measurements byFORC (First-order magnetization curves) of exchange bias systems

**KEY:** G

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**CENTRE:** Forschungszentrum Rossendorf Institut fuer Ionenstrahlphysik und Materialforschung Abteilung Nanofunktionsschichten

**PLACE:** Dresden **COUNTRY:** Germany

**YEAR:** 2006-2007 **LENGTH:** 1 month (2 stays)

**TOPIC:** Influence of irradiation on magnetic systems

**KEY:** P, G

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**CENTRE:** Institute Laue Langevin (ILL)

**PLACE:** Grenoble **COUNTRY:** France

**YEAR:** 2007 **LENGTH:** 2 weeks

**TOPIC:** Neutron diffraction experiments of MnO nanoparticles, to investigate both crystallographic and magnetic structures of these particles.

**KEY:** P, G

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**CENTRE:** American Center for Physics (ACP)

**PLACE:** Maryland (Washington) **COUNTRY:** USA

**YEAR:** 2007 **LENGTH:** 2 weeks

**TOPIC:** Organization of the 52nd MMM conference and several scientific meetings

**KEY:** G

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**CENTRE:** University of Paris

**PLACE:** Paris **COUNTRY:** France

**YEAR:** 2007 **LENGTH:** 2 weeks

**TOPIC:** Collaborative action in the study of metallic glasses

**KEY:** G

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**CENTRE:** Berlin Neutron Scattering Center

**PLACE:** Berlin **COUNTRY:** Germany

**YEAR:** 2008 **LENGTH:** 1 week

**TOPIC:** Magnetic and structural measurements on core-shell nanoparticles

**KEY:** P, G

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**CENTRE:** Institute Laue Langevin (ILL)

**PLACE:** Grenoble **COUNTRY:** France

**YEAR:** 2008 **LENGTH:** 1 week

**TOPIC:** Neutron diffraction on onion-like nanoparticles

**KEY:** P, G

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**CENTRE:** The Swiss Light Source synchrotron - Paul Scherrer Institute

**PLACE:** Villingen **COUNTRY:** Switzerland

**YEAR:** 2008 **LENGTH:** 1.5 weeks

**TOPIC:** Dichroism measurements on magnetic nanoparticles

**KEY:** P, G

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**CENTRE:** Xi'an (Center of Research)  
**PLACE:** Xi'an **COUNTRY:** China  
**YEAR:** 2008 **LENGTH:** 2 weeks  
**TOPIC:** Participation in a collaborative meeting on the study of metallic glasses  
**KEY:** G

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**CENTRE:** Sao Carlos Universidad Federal  
**PLACE:** Sao Carlos **COUNTRY:** Brazil  
**YEAR:** 2008 **LENGTH:** 1 month  
**TOPIC:** Thermal and mechanical measurements of bulk metallic glasses  
**KEY:** G

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**CENTRE:** Diamond Light Source synchrotron  
**PLACE:** Didcot **COUNTRY:** United Kingdom  
**YEAR:** 2008 **LENGTH:** 1.5 weeks  
**TOPIC:** Observation of antiferromagnetic domains by photoemission electron microscopy (PEEM) in patterned ferromagnetic-antiferromagnetic dots  
**KEY:** P, G

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**CENTRE:** Argonne National Laboratory (Advanced Photon Source)  
**PLACE:** Argonne **COUNTRY:** USA  
**YEAR:** 2009 **LENGTH:** 2 setmanes  
**TOPIC:** Experiment at the APS-ANL (magnetic dichroism using synchrotron radiation)  
**KEY:** P

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**CENTRE:** Helmholtz-Zentrum Berlin für Materialien und Energie GmbH  
**PLACE:** Berlin **COUNTRY:** Alemnya  
**YEAR:** 2009 **LENGTH:** 1 setmana  
**TOPIC:** Synchrotron experiment on magnetic nanoparticles  
**KEY:** P

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**CENTRE:** ILL Grenoble, France  
**PLACE:** Grenoble **COUNTRY:** France  
**YEAR:** 2011 **LENGTH:** 1 setmana  
**TOPIC:** Experiment of neutron diffraction at the Insitute Laue-Langevin (ILL, Grenoble), to investigate mesoporous materials.  
**KEY:** P

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## Master/PhD Thesis Juries

20/10/2005: Member of the Jury Committee of the PhD Thesis entitled: "Effets de taille finie sur les couplages magnétostatiques et l'anisotropie d'échange dans le domaine de l'enregistrement magnétique" by Vincent Baltz (SPINTEC, Grenoble, France).

14/03/2006: Member of the jury of the Master Thesis entitled: "Characterization of ZrCuAlNi and TiCuNiSnTa alloys. Influence of different processing routes on their properties" by Azat Gimazov (UAB, Bellaterra, Spain).

04/02/2008: Member of the Jury Committee of the Master Thesis entitled "Síntesis y caracterización de propiedades físicas de películas delgadas de LaSrMnO crecidas por depósito de soluciones químicas" by César Moreno (Institute of Materials Science ICMAB, Bellaterra, Spain).

10/11/2008: Member of the jury Master Thesis entitled "Autoensamblaje dirigido de nanoestructuras de CeGdO crecidas por vía química sobre sustratos nanoindentados" by Jone Zabaleta Llorens (Institute of Materials Science ICMAB, Bellaterra, Spain).

21/07/2010: Member of the jury Master Thesis entitled: "Interface Phenomena in manganite thin films" by David Pesquera (UAB, Bellaterra, Spain).

18/07/2011: Member of the jury Master Thesis entitled: "Estudi de l'orientació cristal·logràfica de materials metàl·lics mitjançant EBSD" by Marcos Rosado (UAB, Bellaterra, Spain).

19/09/2011: Member of the jury Master Thesis entitled: "Transport properties across  $\text{LaAlO}_3/\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3$  (LAO/LSMO) interfaces" by Regina Galceran (UAB, Bellaterra, Spain).

31/05/2012: Member of the Jury of the PhD Thesis entitled "Synthesis of magnetic nanoparticles and strategies towards magneto-photonic materials" by Oana Pascu, at ICMAB (Bellaterra, Spain).

06/06/2013: Member of the Jury of the PhD Thesis entitled "Materials and Fabrication Methods for Magnetic Intraocular Microrobots" by Kartik M. Sivaraman, at ETH-Zürich (Zürich, Switzerland).

07/10/2015: Member of the Jury of the PhD Thesis of Chaoren Liu, at UPC. Other jury members were: J.LI. Tamarit from UPC and J. Qiao from Université de Lyon (France).

26/09/2016: Member of the Jury of the PhD Thesis entitled "Kinetic spraying deposition of metallic glasses" by John Dairo Henao Penenrey. Other jury members were: José Ignacio Peña, María Sarret, Helene Ageorge, Javier S. Blázquez Gámez.

02/12/2016: Member of the Jury of the PhD Thesis entitled "Magnetization processes of magnetic modulated nanowires" by Ester Palmero (Qualification: Sobresaliente). Other Jury members: Ricardo Ibarra, María Pilar Prieto, David Navas, Manuel de la Prida.

23/01/2018: Member of the Jury of the PhD Thesis entitled "Micro-mechanics of 3D architected metals synthesized by electrodeposition" by Maxime Mieszala at EPFL, Switzerland.

23/11/2018: Member of the Jury of the PhD Thesis entitled "Impact hazard associated with large meteorites from disrupted asteroids and comets", by Manuel Moreno Ibáñez, at Institute of Space Sciences, Spain.

12/04/2019: Member of the Jury of the PhD Thesis entitled "Low dimensional dense and nanostructured Fe-based alloys for smart materials" by Matteo Cialone, at University of Torino, Italy.

20/01/2022: Member of the Jury of the PhD Thesis entitled "New insights into Cr electrodeposits obtained from Cr(III)-based electrolytes: effect of the chemistry and semiconducting properties of their oxide films on the corrosion behavior" by Jonathan Leon, at UAB, Spain.

05/09/2022: Member of the Jury of the PhD Thesis entitled "Multi-scale and multi-dimensional composite magnetoelectric multiferroics" by Donghoon Kim, at ETH Zurich, Switzerland.

25/11/2022: Member of the Jury of the PhD Thesis entitled "Photoresistance and electroresistance in ferroelectric tunnel junctions based on BaTiO<sub>3</sub> and Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub>" by Xiao Long, at ICMAB, Spain.

16/12/2022: Member of the Jury of the PhD Thesis entitled "Modeling the interaction of ferromagnetic skyrmionic structures with material defects and superconductors" by Leonardo González, at UAB, Spain.

22/03/2023: Member of the Jury of the PhD Thesis entitled "Detailed temperature and angular investigation on magnetic properties of model transition metal oxides" by Jose Manuel Diez Toledano, at Universitat Autònoma de Madrid, Spain.

31/03/2023: Member of the Jury of the PhD Thesis entitled “Modelling Nanomagnetic Systems: Towards the Skyrmionic Bit” by Josep Castell, at Universitat Autònoma de Barcelona, Spain.

17/04/2023: Member of the Jury of the PhD Thesis entitled “The Versatility of Machine Learning Techniques in Materials Science: A Multiscale Study” by Udaykumar Gajera, at University of Torino, Italy.

02/06/2023: Member of the Jury of the PhD Thesis entitled “Solid-state lithium magnetoionics for voltage control of magnetic phenomena” by Maria Ameziane, at Aalto University, Finland.

## Conferences/Workshops Organization

01/06/2007: Local committee member of the: Summer School on Women in Nano: Career development and research trends (Coma-ruga, Spain).

05/11/2007: Program Committee Member of the 52<sup>nd</sup> Magnetism and Magnetic Materials Conference (Tampa, Florida, USA).

06/05/2008: Chairman of the "Exchange Bias" session at Intermag 2008 (Madrid, Spain).

10/11/2008: Program committee member of the "Segundo Workshop Español de Nanolitografía" (Barcelona, Spain).

17/06/2009: Co-chairman of the “International Workshop on the Structural and Mechanical Properties of Metallic Glasses” (IWMG09) (Castelldefels, Spain). Webpage: <http://mie.esab.upc.es/iwmg09/index.php>

06/09/2009: *Chairman* of the session B13 “*Metallic Glasses*” at Euromat 2009 (Glasgow, UK).

06/07/2010: Co-organizer of DIVERSITY - ISMANAM 2010 *Satellite Meeting: Some views on the situation of women in materials research institutions* (Zürich, Switzerland).

07/07/2010: Chairman of the session “*Bulk Metallic Glass Applications*” at 17<sup>th</sup> *International Symposium on metastable, amorphous and nanostructured materials* (Zürich, Switzerland).

17/11/2010: Chairman of the session "Soft Magnets" at the 55<sup>th</sup> Conference on Magnetism and Magnetic Materials (Atlanta, USA).

27/06/2011: Member of the *National Advisory Committee* of the congress ISMANAM 2011 (Gijón, Spain).

28/06/2011: Organizer of the "Diversity Meeting" 2011 (Gijón, Spain).

05/09/2011: *Chairman* of "*Bulk Metallic Glasses*" at RQ14 (Salvador de Bahia, Brazil).

10/09/2011: *Chairman* at the *5<sup>th</sup> International Workshop on Amorphous and Nanostructured Magnetic Materials* - ANMM 2011 (Iasi, Romania).

25/10/2011: *Chairman* on the "electron microscopy and related techniques" at the 1st BioTiNet Workshop "Advanced Methods for Materials Characterization" (Ljubljana, Slovenia).

03/06/2012: Co-organizer of the Summer School "Titanium in medicine" (Caldes d'Estrach, Spain).

24/10/2012: *Scientific Committee member* of the "XXVIII Trobades Científiques de la Mediterrània" (Maó, Spain).

21/07/2013: Chair/Organizer of the Workshop "Electrodeposited Composite Materials for Advanced Technologies" at the 21st Annual International Conference on Composites/nano engineering (Tenerife, Spain)

04/11/2013: *Program Committee Member* and Chair of the Session "Ultra-Thin Film Magnetism II" of the 58th MMM (2013) Conference (Denver, USA).

01/07/2013: *Chairman* of the Session entitled "Nanostructured Materials" of the Conference ISMANAM 2013.

25/01/2014: *Program Committee Member* of the InterMag 2014 Conference (Dresden, Germany).

06/03/2015: Organization of the SELECTA-ETN Kick-off Meeting (Chairman).

15/05/2015: *Scientific Committee Member* of the "2015 E-MRS SPRING MEETING" (Workshop entitled "Electrochemical processes for nanomaterials and their properties")

17/06/2015: *Chairman* of a Session at the CC3DMR 2015 Conference (South Korea).

01/07/2015: *Program Committee Member* of the "International Conference of Magnetism" (ICM 2015), subtopic "Sub-Topic "Magnetic Thin Films and Multilayers.

10/07/2015: Local Committee Member of the International Conference of Magnetism 2015.

15/07/2015: Chairman of the “Magnetic Materials” Session at the ISMANAM 2015 Conference.

03/09/2015: Chairman of one session at the ENM Conference, Spain.

22/09/2015: Chairman of the Euromat 2015- Symposium B1.3: Metallic Glasses, Rapid Solidification, Nanocrystallization.

21/02/2016: Member of the International Program Committee for the "EMN Meeting on Metallic Glasses", Kuala Lumpur, Malaysia (September 12-14, 2016).

20/05/2016: Chairman at the EMN Meeting on 2D Materials (San Sebastian)

05/07/2016: Advisory/organising committee of the Asian Advanced Materials Congress (Singapore, 11-16 March 2017)

02/11/2016: Chairman of the Session "Nanoparticles and Nanowires" at the MMM Conference

04/11/2016: FIMPART Executive Committee (coordinator of the International Symposium on Metallic Glasses)

12/07/2017: Chairman of a session at the FIMPART Conference (Session on Magnetic Materials)

22/08/2017: Member of organising committee of Advanced Materials Congress 2017-2018 (22 - 24 August 2017, Stockholm, Sweden)

25/10/2017: Co-organizer of the “e-minds” COST Meeting (Barcelona, 25-29 October, 2017). Chairman of the STSM presentations.

07/01/2018: Chairman at the SELECTA Winter School (Cambridge, 07-12 January, 2018).

06/02/2018: Chairman of the session “Materials for Energy” at the IEEE-AIM 2018 Conference (4-7 February 2018, La Thuile, Italy)

28/05/2018: Chairman of the “International Workshop on Magneto-Electric Actuation, Magneto-ionics and Related Phenomena in High-Surface Area Materials” (IW-MAG’18) (28-30 June 2018, Gavà, Spain).

07/06/2018: Organizing Committee Member for the upcoming “International Conference on Materials Research & Development” held during October 29-30, 2018 in Prague, Czech Republic (29-30 October 2018, Prague, Czech Republic).

27/06/2018: 32nd International Conference on Surface Modification Technologies (SMT32 + EAST FORUM 2018) (27-30 June 2018, San Sebastian, Spain).

20/09/2018: Chairman of the Session X: Basic and Functional Properties of Symposium F of the E-MRS Conference 2018 Fall Meeting (17-20 September 2018, Warsaw, Poland).

27/09/2018: Chairman of the Hall 1 Session of the MSCMP (9th International Conference on Materials Science and Condensed Matter Physics) (24-27 September 2018, Chisinau, Moldova).

27/10/2018: Organizing Committee of the '4<sup>th</sup> International Conference on Crystallography & Novel Materials' (19-20 November 2018, Buchares, Romania).

14/07/2019: Chair of the Session D5 - "Nanoporous and high-entropy materials" at the ISMANAM 2019 conference (08-12 July 2019, Chennai, India)

14/05/2019: International Symposium/Topic Coordinator (Metallic Glasses) at FIMPART 2019 (15-19 December 2019, Ahmedabad, Gujarat, India)

18/10/2019: Chair of "Session 5: Magnetic and Multiferroic Materials" at the International Congress on Advanced Materials Sciences and Engineering (AMSE-Vienna) (online)

23/10/2019: Honorable Committee Member for Euro Materials 2020 (online)

06/01/2020: Organizer of the WE-Heraeus-Seminar: "Energy Efficient Magnetoelectric Materials by Ionic Approaches: Fundamentals, Challenges and Perspectives" (26-29 January, Bad Honnef, Germany).

20/02/2020: Scientific and Programme Committee member of the "7th International Congress "Engineering, Environment and Materials in Processing Industry" (17-19 March 2021, Jahorina, Bosnia and Herzegovina).

26/10/2020: Organizer of Intermag 2021 (Best Student Presentation Award Chair) (26-30 April 2021, Grenoble, France).

26/09/2020: Organizer of the First Bioremia Workshop on biomaterials (European Training Network) (1-2 October 2021, online event).

20/03/2021: Co-organizer of the "Materials Challenges for Memory" conference (American Institute of Physics) (12-14 April 2021, online, UK).

05/01/2021: Co-organizer of the 2<sup>nd</sup> Advanced Materials Science World Congress 2021 (Berlin, Germany)

22/01/2021: Organizer of the 2<sup>nd</sup> Advanced Materials Science World Congress 2021 (21-22 March 2021, London, UK).

08/04/2022: Organizing committee member for 5th International Conference on Materials Research and Nanotechnology (ICMRN 2022) (7-8 March 2022).

05/01/2022: Program Co-chair of the MMM 2022 (31 October – 4 November 2022, Minneapolis, USA).

12/12/2022: Scientific Committee Member of the 8th International Congress "Engineering, Environment and Materials in Process Industry, Jahorina, Bosnia and Herzegovina

09/02/2023: Program Committee member of the MMM 2023 (30 October – 3 November 2023, Dallas, USA).

01/07/2023: Chair for the Topic "Functional Hybrid nanostructures and arrays" at ICM 2024 (Bologne, Italy).

30/06/2024: Member of Programme Committee and Session Chair at ICM 2024 (Bologne, Italy).

30/09/2025: Chair of the "Molecular magnetism and ionic spintronics" session at JEMS 2025 (24 – 29 August 2025, Frankfurt, Germany).

02/10/2025: Chairman of a session at NANOBALKAN 2025 (Tirana, Albania).

01/09/2025 – 31/04/2026: Program Committee Member of the Intermag 2026 conference (Manchester, UK).

06/10/2025 – 01/07/2026: Organizer of the Workshop on "Materiales funcionales para TICs y energía" of the XVIII *Congreso Nacional de Materiales* (Portugalete, Spain).

01/10/2025 – 01/05/2026: Organizer of the Session ""Advances in electrical control of magnetism" at the ICSM 2026 Conference (Fethyia, Turkey).

## Editorial Boards

- Since 2007: Member of the Editorial Board of "The Open Materials Science Journal".
- Since 2013: Member of the Editorial Board of "Advances in Alloys and Compounds" (Columbia International Publishing).
- 2013: Guest Editor of the Special Issue entitled "Titanium Materials for Biomedical Application 2013", of the journal "Materials".

- 2014: Guest Editor of the Special Issue entitled “Ordered Mesoporous Materials” of the journal “Nanomaterials”.
- 2014: Editorial Board member of the journal "3D Research" (Springer).
- 2014: Co-editor of the Special Issue "Metallic Glasses" in the journal "Metals".
- 2014: Member of the Editorial Board of “Materials” and “Metals” (MDPI).
- 2015: Member of the Editorial Board of "Materials Research".
- 2015: Associate Editor of “Frontiers-Mechanics of Materials”.
- 2015: Guest Editor of Special Issue in Nanomaterials, entitled "Frontiers in Mesoporous Nanomaterials"
- 2015: Co-editor of the book entitled “Commercialization of Nanotechnologies - A Case Study Approach”, Springer (<http://www.wimb.fink.rs/books.html>).
- 2015: Co-editor of the book entitled “Advances in Application of Industrial Biomaterials”, Springer (<http://www.wimb.fink.rs/books.html>).
- 2015: Member of the Editorial Board of "Nanomaterials".
- 2016: Guest Editor of the special issue entitled "Thin Films and Patterned Structures by Electrochemical Methods" in the journal Coatings (MDPI).
- 2016: Editorial Board member of the journal "Materials Science Research" from the Institute of Science Publishing (London, UK)
- 2016: Editorial Board of Global Journal of Science Frontier Research (USA)
- 2016: Guest Editor of the special issue entitled "Multifunctional Metallic Nanomaterials" in the journal Nanomaterials (MDPI)
- 2016: Editorial Board Member of the journal "Research & Reports on Metals", by SciTechnol (Los Angeles, USA)
- 2017: Guest Editor of the special issue entitled “Permanent biomaterials” in the journal “Applied Sciences” (MDPI).
- 2019-2023: Editor-in-Chief of Section “Nanocomposite Materials” in “Nanomaterials” (MDPI).
- 2020: Associate Editor of APL Materials (AIP).
- 2022: Editorial Board member of APL Energy (AIP).
  
- Reviewer for the following journals: Physical Review Letters, Advanced Materials, Applied Physics Letters, Physical Review B, Journal of Applied Physics, Journal of Magnetism and Magnetic Materials, Journal of Alloys and Compounds, Scripta Materialia, Acta Materialia, Thermochemica Acta, Nanotechnology, Chemistry of Materials, Journal of Materials Research, Journal of Physics D: Applied Physics, Surface Coatings and Technology, Nature Communications, ACS Advances, New Journal of Chemistry, Nature Materials and others.

## Member of Evaluation Commissions

- 2010: Evaluator of Fellowships JAE-Doc PhD at the Institut de Ciència de Materials de Barcelona (ICMAB-CSIC).
- 2011: Evaluator of ANEP, Spain. Evaluator of candidates for Juan de la Cierva and Ramon i Cajal Research Contracts, in the area of Materials Science.
- 2012-2013: Evaluator of the AGAUR- Catalan Agency for Management of University and Research Grants.
- 2014: Evaluator of the College of Reviewers for the Canada Research Chairs Program.
- 2015: Evaluator of Advanced Grants proposals from the European Research Council.
- 2015: External Evaluator for the ANEP (Spain) (Excellence and Research Challenges Calls).
- 2015: Evaluator of COST Actions (European Cooperation in Science and Technology).
- 2015: Evaluator of projects for the Polish National Science Centre.
- 2015: Evaluator for the "Deutsche Forschungsgemeinschaft" (German Research Foundation, DFG)
- 2016: Member of the "Academic Personnel Commission" at the UAB Rectorate, representing the UAB Researchers community - (UAB Government Council)
- 2016: Member of the Evaluation Panel from the Science Foundation Ireland.
- 2016: Member of the Evaluation Panel for AGAUR (Calls: "Llabor", "Producte", "Beatriu de Pinós", etc.).
- 2017: External Evaluator for the National Research Foundation – Singapore.
- 2017: Evaluator for professorship promotion for the University of Texas.
- 2019: Evaluator of Grants from the European Research Council.
- 2020-2021: Evaluator of Marie Skłodowska-Curie postdoctoral Fellowships.
- 2022, 2024: Panel Member for the European Research Council (PE11 CoG).
- 2025 – 2029: Gestor of the MAT-MFU area of the *División de Coordinación, Evaluación y Seguimiento Científico Técnico* of the *Agencia Estatal de Investigación*.

## Outreach/Tech Expo Activities

05/03/2005: Interview at COPE Ràdio Barcelona – talk on nanomagnetism with emphasis on the magnetic vortices effect.

26/06/2005: Divulgative talk entitled “Nanomagnetic Materiales: from permanent magnets to innovative storage devices” at the Museum of Science and Technology of Catalonia (Terrassa).

20/03/2006: Interview at LA MALLA (Xarxa de Televisions Locals de Catalunya).

20/06/2006: Interview at "Matins.COM" at COM Ràdio - to talk about magnetic lithography.

2006-2008: Press release of our work on nanomagnetism in several webpages and virtual journals, such as the Virtual Journal of Nanotechnology, Nanotimes, etc.

04/2009-03/2011: Participation in the NANOLITO network.

02/2014-03/2014: Showcase at the National TV3 (Telenotícies Migdia).

27/02/2015: Interview at “Els matins de TV3”.

01/04/2015: Video “Universidad Responde” (about nanomagnetism and devices).

01/09/2015: Video NEO (Research Showcase).

08/02/2016: Interview at “La Razón”.

14/06/2016: Plenary Talk at the Gordon Seminars/ The armourers and brasiers' Cambridge forum / University of Cambridge

04/10/2016: Interview at ABC about the Nobel Prize in Physics 2016.

16/10/2016: Interview at ABC about our group activities.

10/11/2016: Interview at RTVE radio (Radio Nacional de España)

19/01/2017: Talk at St. Cugat (Cosmos i Vida 2017): La física quàntica i l'estalvi energètic als ordinadors i les comunicacions.

27/01/2017: Seminar at University Paris Sud (Recent advances in the field of nanoporous magnetic materials).

28/01/2017: Highlight of the work on how to deviate meteorites with mechanical impacts (TVE-TV1 News, New Scientist, other press)

12/06/2017: Interview at Radio Vallromanes

17/07/2017: Interview at the radio "La Cope" (program "La tarde") to talk about energy efficiency in computers

27/12/2017 onwards: Participation at Divulcat.cat (Enciclopèdia Catalana)

18/01/2018: Talk entitled "La importància del magnetisme a l'univers: conceptes bàsics i aplicacions"

09/03/2018: ALBA Synchrotron Talk: On the importance of magnetism at the 'universe-scale' and on the Earth: from basic concepts to the state-of-the-art in magnetic computation

17/04/2018: Participation in "La Aventura del saber" (TVE).

26/11/2018: GEFES website (Spanish Physical Society). Highlight of our work "Inducción/supresión de ferromagnetismo mediante la aplicación de voltaje con electrolitos"

30/11/2018: UAB Divulga, highlight on our work "Magnetic switch, induction or suppression of ferromagnetism through electric voltage" (publication in *ACS Nano*).

25/04/2019: Talk on Quantum Physics and Magnetism, with focus on magnetic recording media, at Sant Cugat, as part of the Dissemination Project: "FRONTERES DEL CONEIXEMENT : DIVERSITAT I INTERRELACIONS DE LA CIÈNCIA" (AASCV'19).

21/05/2019: Pint of Science Festival, Sant Cugat, "Quantum is coming"

20/09/2019: News at 324 TV Channel highlighting our study on how to potentially deviate threatening asteroids using target impacts (in collaboration with Josep Trigo).

22/10/2019: Seminar focused on the impact of publishing in "Open Access" on the scientific research output.

15/01/2021: Video Capsule "Magneto lònica un impuls per l'estalvi energètic" (Amics UAB)

04/03/2022: Article highlighting our research in "Muy Interesante"

08/11/2022: Interview on Radio Sabadell & Radio Terrassa during the program "Connectats a la Xarxa" to talk about our recent work on new materials for neuromorphic computing

10/11/2022: Video "¿Dónde se utilizan los materiales magnéticos en la actualidad?", RTVE.

27/02/2023: Participation at Mobile World Congress 2023 (stand, exhibitor), Barcelona, Spain.

17/10/2023: Stand: Fira de la Innovació de la UAB : Neuromorphic materials based on magneto-ionics, Bellaterra, Spain.

31/10/2023: Online outreach on our work on "Wireless magneto-ionics"  
<https://www.uab.cat/web/newsroom/news-detail/first-ever-wireless-device-developed-to-make-magnetism-appear-in-non-magnetic-materials-1345830290613.html?detid=1345899126787>.

16/01/2025: Meet the Experts, MMM-Intermag 2025, New Orleans, USA.

23/02/2025: Interview at Diga-li Ciència (interview) RTVE-Radio 4, Barcelona, Spain.

23/02/2025: Online outreach. Discovery of "vortion" magnetic synaptic state (published by our group in Nature Communications) has been highlighted by several press media:  
<https://www.uab.cat/web/sala-de-premsa/detall-noticia/creen-un-nou-estat-magnetic-el-vortio-que-imita-les-sinapsis-neuronals-1345829508832.html?detid=1345947272025>;  
<https://www.3cat.cat/324/valles-occidental/>;  
<https://www.muyinteresante.com/ciencia/evolucion-neuronas-artificiales-imitar-sinapsis-materiales-avanzados.html>; <https://interestingengineering.com/innovation/vortion-magnetic-state-memeory>;  
<https://phys.org/nanotech-news/nano-physics/>;  
<https://media24.fr/2025/03/05/une-percee-scientifique-le-vortion-un-nouvel-etat-magnetique-qui-imite-les-synapses-du-cerveau/>; etc.

04/03/2025: Participation at Mobile World Congress 2025 (stand, exhibitor), Barcelona, Spain.

21/10/2025: Stand: Fira de la Innovació de la UAB: Presentatin of Gnm3 group activities with focus on nanomaterials for neuromorphic computing, Bellaterra, Spain.

## Academic Societies

- Member of the **Societat Catalana de Física** (since 2000).
- Member of the **Sociedad Española de Física** (since 2004).
- **Club Español de Magnetismo** (since 2006)
- Member of the **American Nano Society** (since 2011).
- Member of the **Sociedad Española de Materiales**, SOCIEMAT) (since 2015).
- Member of the **Associació Astronòmica de St. Cugat/Valldoreix** (since 2015).

- Member of the **Nanosmat Society** (since 2017).
- Member of the **American Physical Society** (since 2018).
- Member of the **European Magnetism Association** (since 2019).
- Member of **Technical Committee of the IEEE Magnetics Society** (since 2019).
- Member of the **American Ceramic Society** (since 2020).
- Member of the **Education Committee of the IEEE Magnetics Society** (since 2021).
- Member of **NeuromimeTICs**, a multidisciplinary research network promoting research to face societal challenges through deep learning applications (since 2020).
- Member of the **AdCom MMM** (American Institute of Physics (2021 – 2028)).
- Member of **Spin Factory** (since 2022).

## Scientific Collaborations (Selected)

### France

- Grenoble High Magnetic Field Laboratory (GHMFL), Dr. Chouteau
- Laboratorio Louis Neel, CNRS, Grenoble, Pr. D. Givord
- Laboratoire SPINTEC, CEA/CNRS, Grenoble, Dr. B.Dieny
- LPMC, UMR 5830 CNRS-INSA-UPS, Pulsed Magnetic Fields Laboratory, Toulouse; Dr. F. Bobo
- Several groups at the Institut Laue-Langevin and the E.S.R.F. (Grenoble).

### USA

- Lujan Center, Los Alamos National Laboratory, New México, Dr. M. Fitzimmons
- Argonne Nacional Laboratory, Argonne, Dr. A. Hoffmann, Dr. A. Petford-Long
- University of Colorado Boulder, Dr. K. S. Buchanan
- Universtiy of California Davis, Davis, Prof. K. Liu
- NIST Center for Neutron Research, National Institute of Standards and Technology, Gaithersburg, Dr. J. Borchers
- Department of Chemical Engineering, Northeastern University, Boston, Prof. E. J. Podlaha-Murphy.

### Poland

- Institute of Physics, Warsaw, Dr. E. Jedryka

## **Germany**

- Rheinisch-Westfälische Technische Hochschule RWTH, Aachen; Pr. G. Guntherodt
- CAESAR/Ludwig-Erhard-Allee 2, 53175 Bonn, Pr. M. Giersig
- IFW, Dresden, Pr. J. Eckert
- Forschungszentrum Rossendorf Institut fuer Ionenstrahlphysik und Materialforschung  
Abteilung Nanofunktionsschichten, Dresden, Prof. J. Fassbender

## **United Kingdom**

- Department of Materials Science, Universidad of Cambridge, Cambridge, Prof. A. L. Greer

## **Switzerland**

- Paul Scherrer Institute, Villigen, Prof. L. Heyderman
- Institute of Robotics and Intelligent Systems (IRIS) at ETH Zurich, Dr. S. Pané, Prof. B. Nelson.

## **Brazil**

- Universidade de São Carlos, Prof. W. Botta

## **Colombia**

- Departamento de Física, Universidad del Valle, Cali, Colombia, Dr. G.A. Pérez-Alcázar

## **Sweden**

- Department of Materials Science and Engineering, Royal Institute of Technology, Stockholm, Prof. K. V. Rao
- Chalmers University of Technology, Dr. U. Klement.

## **Russia**

- Institute for Metals Superplasticity Problems, Ufa, Prof. Zhilyaev
- St. Petersburg Nuclear Physics Institute, Gatchina, St. Petersburg, Prof. I. V. Golosovsky

## **China**

- School of Materials Science & Engineering, Anhui University of Technology, Maanshan Anhui, Dr. W. H. Li

## **Lithuania**

- Department of Physical-Chemistry, Vilnius University, Prof. H. Cesiulis.

## Belgium

- Department MTM, Katholieke Universiteit Leuven, Prof. Celis and Dr. N. Tyntaru.

## Italy

- INRIM, Dr. P. Tiberto.
- University of Torino, Dr. P. Rizzi.

## Greece

- University of Ioannina, Dr. C. Lekka.

## Spain

- Instituto de Ciencia de Materiales de Barcelona (ICMAB), Consejo Superior de Investigaciones Científicas, Dr. E. Molins, Prof. T. Puig, Prof. X. Obradors
  - Laboratorio de Física de Superficies, Universidad Autónoma de Madrid (UAM), Pr. R. Miranda
  - Institut Català de Nanotecnologia (ICN-CIN2): Prof. J. Nogués, Prof. P. Gambardella, Prof. P. Ordejón.
  - Centre Nacional de Microelectrònica (CNM): Prof. J. Montserrat, Prof. E. Lora-Tamayo
  - Universidad de Oviedo. Prof. P. Gorria
  - Others
- Currently, I have **formal Collaboration Agreements** with **Gestamp-Linares**, the **Fábrica Nacional de Moneda y Timbre** and the **CIDETEC Center** in San Sebastián.

## Prizes and Awards

- **“Premi Jordi Porta i Jué”** award from the *Societat Catalana de Física*, April 2001.
- **“Premio a investigadores noveles en el área de Física Experimental 2003”**, award from the *Real Sociedad Española de Física*.
- **Award to “Young Scientist”** at the International Symposium of Metastable and Mechanically Alloyed Materials (**ISMANAM 2005**), Paris.
- **Extraordinary Thesis Award** in the Materials Science program at Universitat Autònoma de Barcelona.
- Best **Poster Prize** at the III Joint European Magnetic Symposia (San Sebastián 2006).

- **"Excellence in Research Award"** by the Autonomous University of Barcelona (2008)
- Accreditation as **Profesor Lector (2003)**, **Reserach Accreditation (2006)** and **Advanced Research Accreditation (2009)** by the University Quality Agency (AQU) of the Generalitat de Catalunya.
- **Bronze Prize in NANOSMAT-2012 Young Scientist Lecture** Competition for: N. Tsyntsaru, H. Cesiulis, E. Pellicer, J. Sort, J.P. Celis, Structural, magnetic and mechanical properties of electrodeposited Co-W thin films, NANOSMAT, Prague (Czech Republic), September 2012.
- **First Prize in the "Science as Art" Competition of the MRS Spring Meeting** (2014), for the work "Nano-Orchard", based on the electrodeposition of a nanoforest of CuNi alloy.



- **Science & Technology Prize**, awarded by the **Federation of European Materials Societies (FEMS)**, Warsaw, 2015.
- **First Prize poster Award at the 3<sup>rd</sup> Scientific Meeting 2017 BCN-b PhD students in Nanoscience** (poster of Cristina Navarro), Bellaterra, 2017.
- **Award to our PhD student Jin Zhang (The Schwäbisch Gmünd Prize for Young Scientists**, European Academy of Surface Technology, EAST). 7th April 2017
- **Extraordinary PhD award (UAB) for my PhD students Amadeu Concustell (2010), Jordina Fornell (2014), Aida Varea (2015), Jin Zhang (2018), Irati Golvano (2019), Alberto Quintana (2020) and Evangelia Dislaki (2021).**
- **Poster Award to my PhD student, Cristina Navarro at the 2018 European School on Magnetism "Magnetism by light" (Krakow, September 2018).**
- **Second Prize and Public Prize to my PhD student, Cristina Navarro at the "Thesis in 4 minutes" contest at UAB (Bellaterra, May 2019).**
- **Elected Fellow of the Institute of Physics (IoP, UK, 2020).**

- **Received the Duran Farell Award for Technological Research (by UPC and Naturgy, 2020).**
- **Award to our PhD student Konrad Eiler (The Schwäbisch Gmünd Prize for Young Scientists, European Academy of Surface Technology, EAST, February 2021).**
- **Elected member of the Technical (2019) and Educational (2021) Committees of the IEEE Magnetics Society and AdCom Member of the MMM (American Institute of Physics, Jan 2022).**
- **Best poster award at the E-MRS Spring Meeting (2023).** Presenting Author: Paul Nizet.